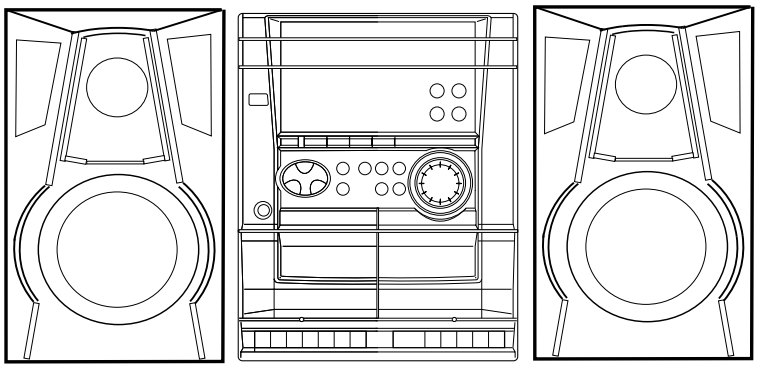
aiwa SERVICE

NSX-AJ14 U
NSX-BL14E HA
NSX-BL14 HS, EZ, K
NSX-BL16 EZ



SERVICE MANUAL

COMPACT DISC STEREO
CASSETTE RECEIVER

BASIC TAPE MECHANISM : ZZM-2 PR1NM
BASIC CD MECHANISM : AZG-1 ZA3RNDM

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-AJ14<U>	CX-NAJ14	SX-NAJ11	RC-ZAS02
NSX-BL14<HS,EZ,K>	CX-NBL14	SX-NBL11	
NSX-BL16<EZ>		SX-NBL16	
NSX-BL14E<HA>	CX-NBL14E	SX-NBL17	

- This Service Manual is the “Revision Publishing” and replaces “Simple Manual” NSX-AJ14(U)/BL14E(HA)/BL14(HS,EZ,K)/BL16(EZ), (S/M Code No. 09-003-428-8T2).
- If requiring information about the CD mechanism, see Service Manual of AZG-1 (S/M Code No. 09-001-335-3NC).

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S/M Code No. 09-004-428-8R2

REVISION DATA

SPECIFICATIONS

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	U,HA,HS: 13.2 dBf EZ,K: 16.8 dBf
Antenna terminals	75 ohms (unbalanced)

<AM/MW tuner section>

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<LW tuner section><EZ,K>

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

<Amplifier section>

Power output	Rated U: 10 W + 10 W (50 Hz - 20 kHz, T.H.D. less than 1%, 6 ohms) 15 W + 15 W (1 kHz, T.H.D. less than 10%, 6 ohms) HA: 28 W + 28 W (1 kHz, T.H.D. 1%, 6 ohms) Reference: 35 W + 35 W (1 kHz, T.H.D. 10%, 6 ohms) HS: 17 W + 17 W (1 kHz, T.H.D. 1%, 6 ohms) Reference: 20 W + 20 W (1 kHz, T.H.D. 10%, 6 ohms) EZ,K: 12 W + 12 W (1 kHz/DIN 45500, T.H.D. 1%, 6 ohms) Reference: 15 W + 15 W (1 kHz/DIN 45324, T.H.D. 10%, 6 ohms) EZ:DIN MUSIC POWER: 30 W + 30 W
Total harmonic distortion	U,EZ,K: 0.1% (6 W, 1 kHz, 6 ohms, DIN AUDIO) HA: 0.1% (14 W, 1 kHz, 6 ohms, DIN AUDIO) HS: 0.1% (8 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 500 mV HS: MIC 1.8 mV(10 kohms)
Outputs	SPEAKERS: accept speakers of 6 ohms or more PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz - 8000 Hz
Recording system	AC bias
Heads	Deck 1 : Recording/Playback head x 1, erase head x 1 Deck 2 : Playback head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)

<Speaker system>SX-NAJ11<U>

Speaker System	2 way, bass reflex (magnetic shielded type)
Speaker units	Woofer: 120 mm ($4^{3}/_{4}$ in.) cone type Tweeter: 20 mm ($^{13}/_{16}$ in.) cone type
Impedance	6 ohms
Sensitivity	87 dB/W/m
Dimensions (W x H x D)	220 x 324 x 211 mm ($8^{3}/_{4}$ x $12^{7}/_{8}$ x $8^{3}/_{8}$ in.)
Weight	2.0 kg (4 lbs 7 oz.)

<Speaker system>SX-NBL17<HA>,SX-NBL11<HS,14EZ,K>, SX-NBL16<16EZ>

Speaker System	2 way, bass reflex (magnetic shielded type)
Speaker units	Woofer: 120 mm cone type Tweeter: 20 mm cone type
Impedance	6 ohms
Sensitivity	87 dB/W/m
Dimensions (W x H x D)	220 x 324 x 211 mm
Weight	2.0 kg

<General>

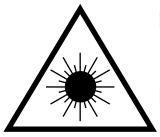
Power requirements	U: 120 V AC, 60 Hz HA: 120 V/220-230 V/240 V AC (switchable), 50/60 Hz HS: 220 V AC, 60 Hz EZ,K: 230 V AC, 50 Hz
Power consumption	U: 38 W HA: 55 W HS: 60 W EZ,K: 45 W
Power consumption in standby mode	U: With power-economizing mode off : 8 W HA: With power-economizing mode off : 12 W HS,EZ,K: With power-economizing mode off : 14 W With power-economizing mode on : 0.9 W
Dimensions of main unit (W x H x D)	U,EZ,K: 260 x 324 x 348 mm ($10^{1}/_{4}$ x $12^{7}/_{8}$ x $13^{3}/_{4}$ in.) HA,HS: 260 x 324 x 348 mm
Weight of main unit	U: 4.8 kg (10 lbs 9 oz.) HA: 5.7 kg HS: 5.0 kg EZ,K: 4.9 kg

• Design and specifications are subject to change without notice.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

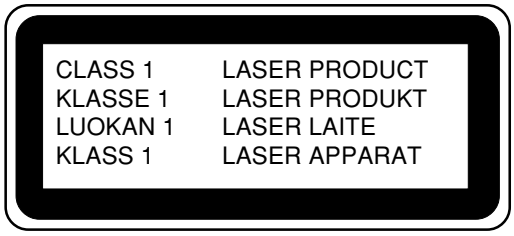
VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION
L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL
Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

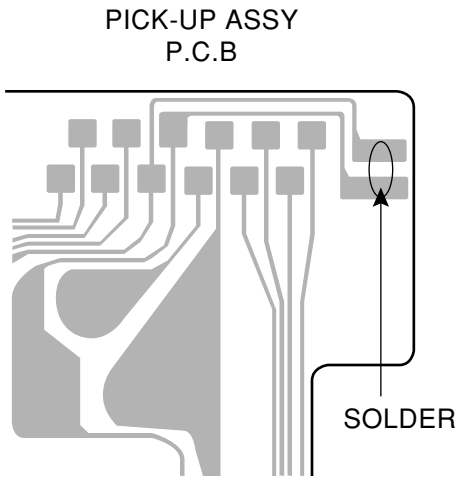


Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.
In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

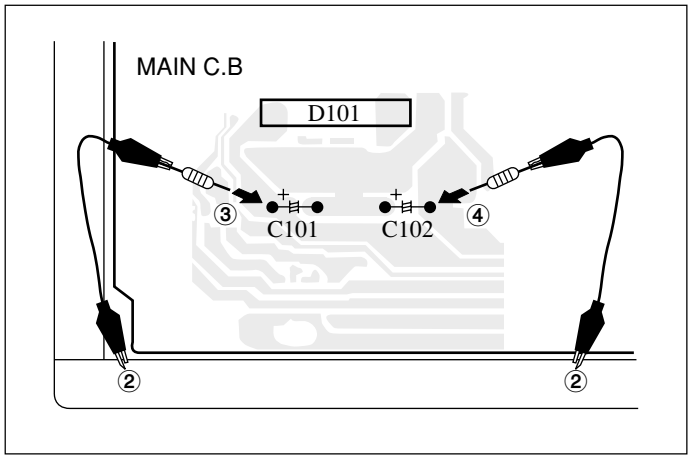


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

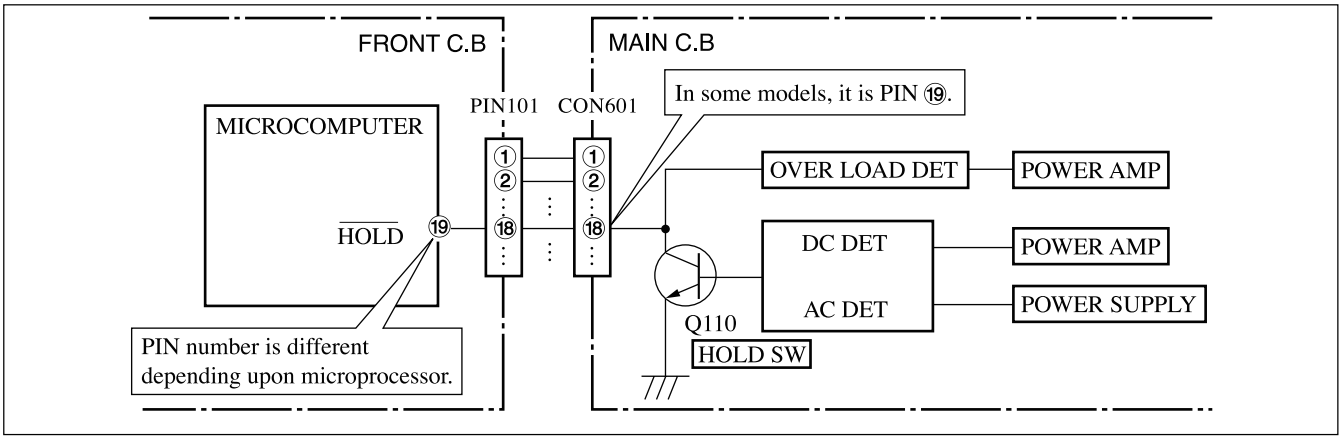


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.
When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

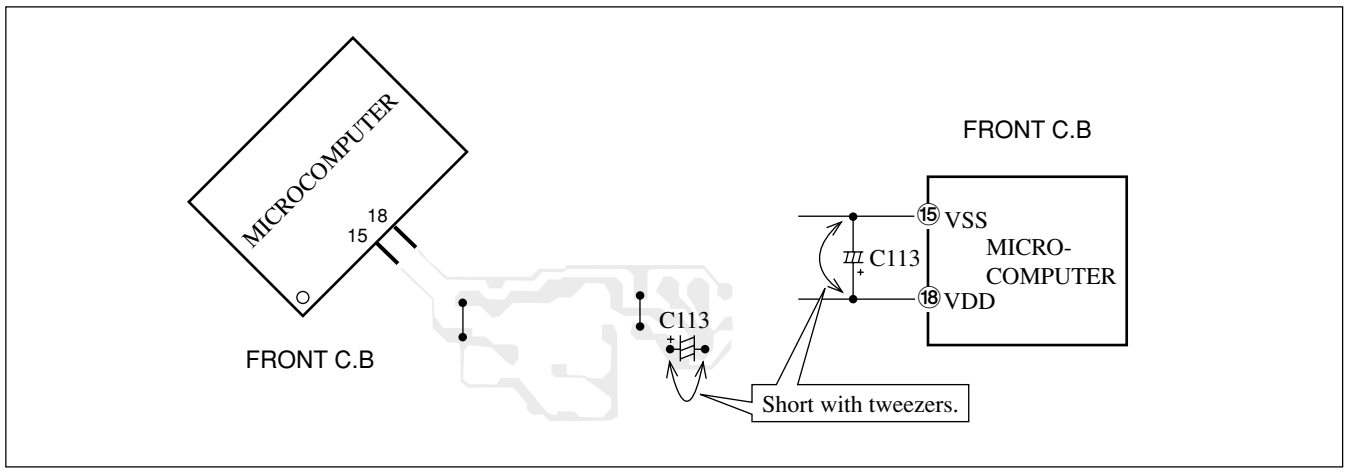


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-NFA-616-010		C-IC,M38B59MFH-E251FP<16EZ>
	8A-NFA-615-010		C-IC,M38B57MCH-E236FP<EXCEPT 16EZ>
	87-A21-397-010		IC,STK490-070<HA>
	87-A21-419-040		C-IC,NJM14558MD-TE2
	87-A21-443-040		C-IC,M62495AFP
	87-A21-415-010		IC,LA1843<EZ,K>
	87-A21-560-010		IC,LA1844L-A<EXCEPT EZ,K>
	87-070-127-110		IC,LC72131 D
	87-A21-629-010		IC,SPS-442-10N
	87-A21-482-010		IC,RPM6938-H4
	87-A20-440-010		C-IC,BU1920FS<16EZ>
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-A30-255-010		C-TR,2SB1342<U>
	87-A30-256-010		TR,2SD1933<U>
	87-A30-190-080		TR,CC5551<U>
	87-026-245-080		TR,DTC114ES<HS,HA>
	87-A30-198-080		TR,KTC3199GR<HS,HA>
	87-A30-090-080		FET,2SK2541
	87-A30-484-080		C-TR,KRA102S
	87-A30-468-080		C-TR,KRC102S-RTK
	87-A30-107-070		C-TR,CMBT5401
	87-A30-106-040		C-TR,CMBT5551
	87-A30-091-080		FET,2SJ460
	87-A30-062-080		C-TR,KRC104S
	87-A30-318-080		TR,CSA952K
	89-333-317-880		TR,2SC3331 (0.5W)
	87-A30-234-080		TR,CSC4115BC
	89-327-143-080		TR,2SC2714 (0.1W)
	87-A30-489-080		C-TR,KRA107S
	89-503-602-080		C-FET,2SK360E<EZ,K>
	87-A30-086-070		C-TR,CSD1306E<EZ,K>
	87-A30-495-080		TR,2SA1981Y
DIODE			
	87-A40-736-080		DIODE,1N4148M (SEM)
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-455-080		DIODE,RL203 GW
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-774-080		ZENER,UZ24BSD
	87-A40-764-080		ZENER,UZ10BSC
	87-A40-313-080		C-DIODE,MC 2840<HA>
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-768-080		ZENER,UZ16BSA<HA>
	87-A40-752-080		ZENER,UZ6.2BSC
	87-A40-739-080		ZENER,UZ2.7BSA
	87-017-149-080		ZENER,HZS6A2L
	87-A40-535-080		DIODE,1N5393-GOODARK<U>
MAIN C.B			
C3	87-010-196-080		CHIP CAPACITOR,0.1-25<HA>
C4	87-010-196-080		CHIP CAPACITOR,0.1-25<HA>
C5	87-010-196-080		CHIP CAPACITOR,0.1-25<HA>
C6	87-010-196-080		CHIP CAPACITOR,0.1-25<HA>
C9	87-010-196-080		CHIP CAPACITOR,0.1-25
C10	87-010-196-080		CHIP CAPACITOR,0.1-25
C11	87-010-196-080		CHIP CAPACITOR,0.1-25
C12	87-010-196-080		CHIP CAPACITOR,0.1-25
C19	87-A10-627-000		CAP,E 2200-50 M SMG<HA>
C20	87-A10-627-000		CAP,E 2200-50 M SMG<HA>
C21	87-016-495-000		CAP,E 3300-25 M SMG<HA,U>
C21	87-A10-520-000		CAP,E 3300-35 M SMG<EZ,K,HS>
C22	87-016-495-000		CAP,E 3300-25 M SMG<HA>
C22	87-016-051-000		CAP,E 2200-35 SMG<EZ,K,HS>
C22	87-A10-011-090		CAP,E 2200-25 SMG<U>
C25	87-010-385-080		CAP, ELECT 220-25V<HA>
C25	87-010-406-080		CAP, ELECT 22-50 M 11L SME<HS>
C25	87-010-407-080		CAP, ELECT 33-50 M 11L SME<EZ,K,U>
C26	87-010-247-080		CAP, ELECT 100-50V<HA>
C26	87-010-406-080		CAP, ELECT 22-50<EZ,K,HS,U>
C30	87-010-247-080		CAP, ELECT 100-50V<HA>
C30	87-010-384-080		CAP, ELECT 100-25M11LSME<EZ,K,HS,U>
C31	87-010-263-080		CAP, ELECT 100-10V
C32	87-010-197-080		CAP, CHIP 0.01 DM
C33	87-010-263-080		CAP, ELECT 100-10V<U,HA>
C34	87-010-247-080		CAP, ELECT 100-50V
C35	87-010-406-080		CAP, ELECT 22-50
C36	87-010-381-080		CAP, ELECT 330-16V
C38	87-A11-567-080		C-CAP,S 0.01-50 K B<EXCEPT HS>
C38	87-010-190-080		C-CAP,S 0.01-50 ZF<HS>
C50	87-010-384-080		CAP, ELECT 100-25 M 11L SME<U>
C60	87-010-403-080		CAP, ELECT 3.3-50V
C97	87-010-196-080		CHIP CAPACITOR,0.1-25<HA>
C100	87-018-127-080		CAP TC-U 470P
C101	87-010-183-080		C-CAP,S 2700P-50 B<HA>
C101	87-010-185-080		C-CAP,S 3900P-50 KB<EZ,K,HS,U>
C102	87-010-183-080		C-CAP,S 2700P-50 B<HA>
C102	87-010-185-080		C-CAP,S 3900P-50 KB<EZ,K,HS,U>
C103	87-010-545-080		CAP, ELECT 0.22-50V
C104	87-010-545-080		CAP, ELECT 0.22-50V
C105	87-010-178-080		CHIP CAP 1000P<HA>
C105	87-010-186-080		CAP,CHIP 4700P<EZ,K,HS,U>
C106	87-010-178-080		CHIP CAP 1000P<HA>
C106	87-010-186-080		CAP,CHIP 4700P<EZ,K,HS,U>
C107	87-010-404-080		CAP, ELECT 4.7-50V<HA>
C107	87-010-403-080		CAP, ELECT 3.3-50V<EZ,K,HS,U>
C108	87-010-404-080		CAP, ELECT 4.7-50V<HA>
C108	87-010-403-080		CAP, ELECT 3.3-50V<EZ,K,HS,U>
C109	87-010-322-080		C-CAP, S 100P-50JCH<EZ,K>
C109	87-010-179-080		C-CAP, S 1200P-50KB<HA>
C110	87-010-322-080		C-CAP, S 100P-50JCH<EZ,K>
C110	87-010-179-080		C-CAP, S 1200P-50KB<HA>
C111	87-010-391-080		CAP,E 10-35 SME<HA>
C111	87-010-406-080		CAP, ELECT 22-50<EZ,K,HS,U>
C112	87-010-391-080		CAP,E 10-35 SME<HA>
C112	87-010-406-080		CAP, ELECT 22-50<EZ,K,HS,U>
C113	87-010-405-080		CAP, ELECT 10-50V<HA>
C113	87-012-156-080		C-CAP, S 220P-50 J CH<EZ,K,U>
C113	87-A10-946-080		C-CAP, S 220P-100 J CH<HS>
C114	87-010-405-080		CAP, ELECT 10-50V<HA>
C114	87-012-156-080		C-CAP, S 220P-50 J CH<EZ,K,U>
C114	87-A10-946-080		C-CAP, S 220P-100 J CH<HS>
C119	87-010-197-080		CAP, CHIP 0.01 DM
C120	87-010-197-080		CAP, CHIP 0.01 DM
C123	87-010-197-080		CAP, CHIP 0.01 DM<EZ,K>
C124	87-010-197-080		CAP, CHIP 0.01 DM<EZ,K>
C125	87-012-368-080		C-CAP,S 0.1-50 F<HA>
C125	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ,K,HS,U>
C126	87-012-368-080		C-CAP,S 0.1-50 F<HA>
C126	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ,K,HS,U>
C127	87-012-368-080		C-CAP,S 0.1-50 F<HA>
C127	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ,K,HS,U>
C128	87-012-368-080		C-CAP,S 0.1-50 F<HA>
C128	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ,K,HS,U>
C129	87-A11-572-080		C-CAP,S 0.015-50 K B<HA>
C130	87-A11-572-080		C-CAP,S 0.015-50 K B<HA>
C131	87-010-197-080		CAP, CHIP 0.01 DM<HA>
C132	87-010-197-080		CAP, CHIP 0.01 DM<HA>
C133	87-010-186-080		CAP,CHIP 4700P
C140	87-010-182-080		C-CAP,S 2200P-50 B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C183	87-010-387-080		CAP,E 470-25 SME<U,EZ,K>
C184	87-010-403-080		CAP, ELECT 3.3-50V<U,EZ,K>
C185	87-018-209-080		CAP, TC U 0.1-50ZF<EZ,K>
C200	87-018-195-080		CAP TC-U 1200P
C300	87-018-195-080		CAP TC-U 1200P
C301	87-010-179-080		CAP,CHIP S B1200P
C302	87-010-179-080		CAP,CHIP S B1200P
C303	87-010-178-080		CHIP CAP 1000P
C304	87-010-178-080		CHIP CAP 1000P
C305	87-010-198-080		CAP, CHIP 0.022
C307	87-010-263-080		CAP, ELECT 100-10V
C308	87-010-263-080		CAP, ELECT 100-10V
C309	87-010-311-080		C-CAP, S 12P-50J CH<EZ,K>
C309	87-010-318-080		C-CAP, S 47P-50J CH<HS,U>
C310	87-010-314-080		C-CAP, S 22P-50J CH<EZ,K>
C310	87-010-318-080		C-CAP, S 47P-50J CH<HS,U>
C311	87-010-598-080		C-CAP,S 0.068-16VRK
C312	87-010-598-080		C-CAP,S 0.068-16VRK
C313	87-010-188-080		CAP,CHIP 6800P
C314	87-010-188-080		CAP,CHIP 6800P
C315	87-010-263-080		CAP, ELECT 100-10V
C317	87-010-546-080		CAP, ELECT 0.33-50V
C318	87-010-546-080		CAP, ELECT 0.33-50V
C320	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ,K>
C321	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ,K>
C324	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ,K>
C325	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ,K>
C326	87-010-198-080		CAP, CHIP 0.022
C327	87-010-196-080		CHIP CAPACITOR,0.1-25
C350	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ,K>
C360	87-010-401-080		CAP, ELECT 1-50V
C363	87-010-197-080		CAP, CHIP 0.01 DM<EZ,K>
C399	87-012-140-080		CAP 470P
C401	87-010-544-080		CAP, ELECT 0.1-50V
C402	87-010-544-080		CAP, ELECT 0.1-50V
C405	87-010-197-080		CAP, CHIP 0.01 DM
C406	87-010-197-080		CAP, CHIP 0.01 DM
C407	87-010-197-080		CAP, CHIP 0.01 DM
C408	87-010-197-080		CAP, CHIP 0.01 DM
C409	87-010-182-080		C-CAP,S 2200P-50 B
C410	87-010-182-080		C-CAP,S 2200P-50 B
C411	87-010-405-080		CAP, ELECT 10-50V
C412	87-010-405-080		CAP, ELECT 10-50V
C452	87-010-382-080		CAP, ELECT 22-25V
C453	87-010-183-080		C-CAP,S 2700P-50 B
C454	87-010-183-080		C-CAP,S 2700P-50 B
C455	87-010-183-080		C-CAP,S 2700P-50 B
C456	87-010-197-080		CAP, CHIP 0.01 DM
C458	87-010-178-080		CAP, CHIP 1000P-50KB<EZ,K>
C459	87-010-175-080		CAP, CHIP 560P-50J SL<EZ,K>
C460	87-010-196-080		CHIP CAPACITOR,0.1-25
C461	87-012-158-080		C-CAP,S 390P-50 CH
C462	87-012-158-080		C-CAP,S 390P-50 CH
C470	87-018-127-080		CAP, TC U 470P-50 BK<U>
C605	87-010-179-080		CAP,CHIP S B1200P
C606	87-010-179-080		CAP,CHIP S B1200P
C609	87-010-213-080		C-CAP,S 0.015-50 B
C610	87-010-213-080		C-CAP,S 0.015-50 B
C611	87-010-545-080		CAP, ELECT 0.22-50V
C612	87-010-545-080		CAP, ELECT 0.22-50V
C613	87-010-545-080		CAP, ELECT 0.22-50V
C614	87-010-545-080		CAP, ELECT 0.22-50V
C615	87-010-154-080		CAP CHIP 10P
C616	87-010-385-080		CAP, ELECT 220-25V<HA>
C616	87-010-248-080		CAP, ELECT 220-10<EZ,K,HS,U>
C617	87-010-385-080		CAP, ELECT 220-25V<HA>
C617	87-010-248-080		CAP, ELECT 220-10<EZ,K,HS,U>
C618	87-010-405-080		CAP, ELECT 10-50V
C630	87-016-669-080		C-CAP,S 0.1-25 K B
C669	87-010-322-080		C-CAP,S 100P-50 CH<EZ,K,HA>
C670	87-010-322-080		C-CAP,S 100P-50 CH<EZ,K,HA>
C677	87-010-197-080		CAP, CHIP 0.01 DM
C771	87-010-263-080		CAP, ELECT 100-10V
C772	87-010-197-080		CAP, CHIP 0.01 DM
C779	87-010-971-080		CAP, CHIP 4700P-50JB<EZ,K>
C780	87-010-971-080		CAP, CHIP 4700P-50JB<EZ,K>
C782	87-010-197-080		CAP, CHIP 0.01 DM
C783	87-010-197-080		CAP, CHIP 0.01 DM
C784	87-010-197-080		CAP, CHIP 0.01 DM
C785	87-010-197-080		CAP, CHIP 0.01 DM
C786	87-010-197-080		CAP, CHIP 0.01 DM
C788	87-010-149-080		C-CAP,S 5P-50 CH
C789	87-A12-052-080		C-CAP,S 0.033-25 J B<U,HA>
C789	87-A11-532-080		C-CAP,S 0.022-50 J B<EZ,K>
C789	87-A10-801-080		C-CAP,S 0.022-16 J B<HS>
C790	87-A12-052-080		C-CAP,S 0.033-25 J B<U,HA>
C790	87-A11-532-080		C-CAP,S 0.022-50 J B<EZ,K>
C790	87-A10-801-080		C-CAP,S 0.022-16 J B<HS>
C791	87-010-196-080		CHIP CAPACITOR,0.1-25
C792	87-010-197-080		CAP, CHIP 0.01 DM
C793	87-010-404-080		CAP, ELECT 4.7-50V
C794	87-010-322-080		CAP, CHIP 100P-50J CH<EZ,K>
C795	87-010-197-080		CAP, CHIP 0.01 DM
C796	87-010-197-080		CAP, CHIP 0.01 DM
C797	87-010-405-080		CAP, ELECT 10-50V
C798	87-010-197-080		CAP, CHIP 0.01 DM
C799	87-010-407-080		CAP, ELECT 33-50V
C800	87-012-369-080		C-CAP,S 0.047-50F
C801	87-010-403-080		CAP, ELECT 3.3-50V
C802	87-012-369-080		C-CAP,S 0.047-50F
C803	87-010-198-080		CAP, CHIP 0.022
C804	87-010-263-080		CAP, ELECT 100-10V
C807	87-010-400-080		CAP, ELECT 0.47-50V
C808	87-010-401-080		CAP, ELECT 1-50V
C809	87-010-401-080		CAP, ELECT 1-50V
C810	87-010-196-080		CHIP CAPACITOR,0.1-25
C814	87-010-197-080		CAP, CHIP 0.01 DM
C815	87-010-400-080		CAP, ELECT 0.47-50V<HS>
C815	87-010-403-080		CAP, ELECT 3.3-50V<EXCEPT HS>
C816	87-010-400-080		CAP, ELECT 0.47-50V<HS>
C816	87-010-403-080		CAP, ELECT 3.3-50V<EXCEPT HS>
C818	87-010-180-080		CAP, CHIP 1500P-50 KB<EZ,K>
C821	87-010-405-080		CAP, ELECT 10-50V
C823	87-010-177-080		C-CAP,S 820P-50 SL<HA,HS,U>
C823	87-012-349-080		C-CAP,S 1000P-50 J CH<EZ,K>
C824	87-010-405-080		CAP, ELECT 10-50V
C825	87-010-596-080		CAP, S 0.047-16
C831	87-010-406-080		CAP, E 22-50 M 11L<EZ,K>
C842	87-010-197-080		CAP, CHIP 0.01 DM
C844	87-010-197-080		CAP, CHIP 0.01 DM
C851	87-010-197-080		CAP, CHIP 0.01 DM
C852	87-010-197-080		CAP, CHIP 0.01 DM
C853	87-010-197-080		CAP, CHIP 0.01 DM
C858	87-010-196-080		CHIP CAPACITOR,0.1-25
C859	87-010-196-080		CHIP CAPACITOR,0.1-25
C860	87-010-197-080		CAP, CHIP 0.01 DM
C869	87-010-197-080		CAP, CHIP 0.01 DM<16EZ>
C871	87-012-156-080		CAP, CHIP S 220P-50 JCH<16EZ>
C872	87-012-156-080		CAP, CHIP S 220P-50 JCH<16EZ>
C873	87-012-140-080		CAP, CHIP S 470P-50 JCH<16EZ>
C874	87-010-405-080		CAP, ELECT 10-50V<16EZ>
C875	87-010-196-080		CAP, CHIP S 0.1-25 FZ<16EZ>
C876	87-010-405-080		CAP, ELECT 10-50V<16EZ>
C877	87-012-156-080		CAP, CHIP S 220P-50 JCH<16EZ>
C878	87-010-316-080		CAP, CHIP S 33P-50 JCH<16EZ>
C879	87-010-314-080		CAP, CHIP S 22P-50 JCH<16EZ>
C940	87-010-197-080		CAP, CHIP S 0.01-25 KB<EZ,K>
C942	87-010-149-080		CAP, CHIP S 5P-50 CH<EZ,K>
C947	87-010-197-080		CAP, CHIP S 0.01-25 KB<EZ,K>
C948	87-012-140-080		CAP, CHIP S 470P-50 JCH<EZ,K>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C952	87-010-197-080		CAP, CHIP S 0.01-25 KB<EZ,K>
C957	87-010-311-080		CAP, CHIP S 12P-50 JCH<EZ,K>
C958	87-010-197-080		CAP, CHIP S 0.01-25 KB<EZ,K>
C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C961	87-010-152-080		C-CAP,S 8P-50 CH<EXCEPT EZ,K>
C962	87-010-401-080		CAP, ELECT 1-50V<EZ,K>
C963	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C971	87-010-381-080		CAP, ELECT 330-16V
C972	87-010-404-080		CAP, ELECT 4.7-50V
C973	87-010-197-080		CAP, CHIP 0.01 DM
C974	87-010-197-080		CAP, CHIP 0.01 DM
C979	87-010-322-080		C-CAP,S 100P-50 CH
C982	87-010-196-080		CHIP CAPACITOR,0.1-25
C983	87-010-197-080		CAP, CHIP 0.01 DM
C984	87-010-197-080		CAP, CHIP 0.01 DM
C985	87-010-322-080		CAP, CHIP 100P-50J CH<EZ,K>
C987	87-010-197-080		CAP, CHIP 0.01 DM
C989	87-010-197-080		CAP, CHIP 0.01 DM<EZ,K>
C993	87-010-178-080		CHIP CAP 1000P
C995	87-010-178-080		CHIP CAP 1000P
C997	87-010-196-080		CHIP CAPACITOR,0.1-25
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF831	87-008-261-010		FILTER, SFE10.7MA5-A<EXCEPT EZ,K>
CF831	87-008-423-010		FILTER, CF SFE10.7MAS3G-A<EZ,K>
CF832	87-008-261-010		FILTER, SFE10.7MA5-A<EXCEPT EZ,K>
CF832	82-785-747-010		CF,MS2 GHY,R<EZ,K>
CN301	87-A60-620-010		CONN,3P V 2MM JMT
CN351	87-A60-625-010		CONN,8P V 2MM JMT
CN601	87-099-719-010		CONN,30P TYK-B(X)
CN602	87-099-194-010		CONN,6P 6216V
CNA1	8A-NF8-652-010		CONN ASSY,7P TID-A(480)<HS>
CNA1	8A-NF8-653-010		CONN ASSY,9P TID-A(480)<HA>
FFE831	A8-8ZA-190-030		8ZA-1 FEUNM<EXCEPT EZ,K>
FFE831	A8-6ZA-191-130		6ZA-1 FEENM<EZ,K>
J101	87-A60-602-010		JACK,DIA6.3 BLK ST W/SW TC
J203	87-A60-238-010		TERMINAL,SP 4P (MSC)<HA>
J602	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V02<U,HA,HS>
J832	87-A60-403-010		TERMINAL,ANT PAL 2P HSP312V05<EZ,K>
L101	87-003-383-010		COIL,1UH-S<EXCEPT U>
L101	87-A50-610-010		COIL,1UH-K(MDEC)<U>
L102	87-003-383-010		COIL,1UH-S<EXCEPT U>
L102	87-A50-610-010		COIL,1UH-K(MDEC)<U>
L451	87-007-342-010		COIL,OSC 85K BIAS
L801	87-A50-540-010		COIL,FM DET (TOK)<EZ,K>
L801	87-A50-608-010		COIL,FM DET-N (TOK)<EXCEPT EZ,K>
L802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)
L811	87-005-847-080		COIL,2.2UH(CECS)
L832	87-005-847-080		COIL,2.2UH(CECS)
L861	87-005-847-080		COIL,2.2UH(CECS)<16EZ>
L941	87-A50-020-010		COIL,ANT LWCOI<EZ,K>
L942	87-A50-019-010		COIL,OSC LWCOI<EZ,K>
L951	8A-NF8-667-010		COIL,AM PACK 4(TOK)<EXCEPT EZ,K>
L951	8A-NF8-668-010		COIL,AM PACK 2(TOK)<EZ,K>
R131	87-A00-258-080		RES,M/F 0.22-1W J<HA>
R132	87-A00-258-080		RES,M/F 0.22-1W J<HA>
R653	87-A11-144-080		CAP,TC U 0.1-50 K B<HA>
R654	87-A11-144-080		CAP,TC U 0.1-50 K B<HA>
R790	87-010-197-080		CAP, CHIP 0.01 DM
R991	87-010-322-080		C-CAP,S 100P-50 CH
R993	87-010-322-080		C-CAP,S 100P-50 CH
R995	87-010-322-080		C-CAP,S 100P-50 CH
TC942	87-011-253-080		TRIMMER,CER 30P 4.0X4.5<EZ,K>
W181	85-NF5-628-010		F-CABLE,7P 2.5<EZ,K,U>
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P<HA>
WH1	87-A90-460-010		HLDR,WIRE 2.5-7P<EXCEPT HA>
X861	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309<16EZ>
X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

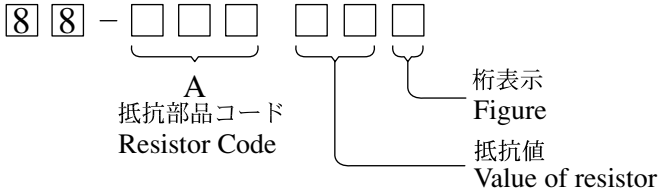
FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C101	87-010-196-080		CHIP CAPACITOR,0.1-25
C102	87-012-369-080		C-CAP,S 0.047-50F
C103	87-010-374-040		CAP, ELECT 47-10
C104	87-A10-797-040		CAP,E 47-35 M 5L SRM
C105	87-010-192-080		C-CAP,S 0.022-50 F
C107	87-010-196-080		CHIP CAPACITOR,0.1-25
C108	87-010-178-080		CHIP CAP 1000P
C109	87-012-369-080		C-CAP,S 0.047-50F
C110	87-010-197-080		CAP, CHIP 0.01 DM
C111	87-010-196-080		CHIP CAPACITOR,0.1-25
C113	87-010-178-080		CHIP CAP 1000P
C114	87-010-154-080		CAP CHIP 10P
C115	87-010-175-080		CAP 560P
C116	87-010-400-040		CAP,E 0.47-50
C117	87-016-460-080		C-CAP,S 0.22-16 B
C118	87-A10-189-040		CAP,E 220-10
C119	87-A10-189-040		CAP,E 220-10
C120	87-012-156-080		C-CAP,S 220P-50 CH
C123	87-010-196-080		CHIP CAPACITOR,0.1-25
C124	87-010-196-080		CHIP CAPACITOR,0.1-25
C125	87-010-405-040		CAP,E 10-50
C126	87-010-196-080		CHIP CAPACITOR,0.1-25
C129	87-010-374-040		CAP,E 47-10
C210	87-012-156-080		C-CAP,S 220P-50 CH
C212	87-010-404-040		CAP,E 4.7-50 SME
C213	87-010-404-040		CAP,E 4.7-50 SME
C401	87-010-186-080		C-CAP,S 4700P-50 K B<HS>
C402	87-010-060-040		CAP,E 100-16 M 7L SRA<HS>
C403	87-010-545-040		CAP,E 0.22-50 M 11L SME<HS>
C404	87-010-322-040		C-CAP,S 100P-50 J CH GRM<HS>
C405	87-010-545-040		CAP,E 0.22-50 M 11L SME<HS>
C406	87-016-669-080		C-CAP,S 0.1-25 K B<HS>
C407	87-010-405-040		CAP,E 10-50 M 11L SME<HS>
C408	87-010-322-040		C-CAP,S 100P-50 J CH GRM<HS>
C409	87-010-378-040		CAP,E 10-16 M 11L SME<HS>
C410	87-010-196-080		C-CAP,S 0.1-25 Z F<HS>
C412	87-010-177-080		C-CAP,S 820P-50 J SL<HS>
C701	87-010-384-040		CAP,E 100-25 SME
C702	87-010-178-080		C-CAP,S1000P-50KB<EZ,K>
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN701	87-A60-673-010		CONN,9P H 2MM JMT
CN801	87-099-015-010		CONN,13P 6216V
EMI401	87-008-372-080		FLTR,EMI BL01 RN1<HS>
FL201	8A-NFA-604-010		FL,10-BT-224GNK
J404	87-A61-242-010		JACK,6.3 BLK MONO W/SW VKM<HS>
L101	87-A50-434-010		COIL,CLK 4.19M(TOKO)
LED101	87-A40-317-080		LED,SLR-342VCT31 RED
S101	87-A91-555-010		SW,RTRY EC12E24504
S301	87-A90-164-080		SW,TACT SKQAB(N)
S302	87-A90-164-080		SW,TACT SKQAB(N)
S303	87-A90-164-080		SW,TACT SKQAB(N)
S304	87-A90-164-080		SW,TACT SKQAB(N)
S305	87-A90-164-080		SW,TACT SKQAB(N)
S306	87-A90-164-080		SW,TACT SKQAB(N)
S307	87-A90-164-080		SW,TACT SKQAB(N)
S308	87-A90-164-080		SW,TACT SKQAB(N)
S309	87-A90-164-080		SW,TACT SKQAB(N)
S310	87-A90-164-080		SW,TACT SKQAB(N)<16EZ>
S311	87-A90-164-080		SW,TACT SKQAB(N)<16EZ>
S312	87-A90-164-080		SW,TACT SKQAB(N)<16EZ>
S321	87-A90-164-080		SW,TACT SKQAB(N)
S322	87-A90-164-080		SW,TACT SKQAB(N)
S323	87-A90-164-080		SW,TACT SKQAB(N)
S324	87-A90-164-080		SW,TACT SKQAB(N)
S325	87-A90-164-080		SW,TACT SKQAB(N)
S326	87-A90-164-080		SW,TACT SKQAB(N)
S327	87-A90-164-080		SW,TACT SKQAB(N)
S328	87-A90-164-080		SW,TACT SKQAB(N)

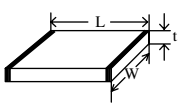
	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	S329	87-A90-164-080		SW,TACT SKQAB(N)
	S330	87-A90-164-080		SW,TACT SKQAB(N)
	S331	87-A90-164-080		SW,TACT SKQAB(N)
	SFR701	87-024-431-080		SFR,3.3K RH063EC
	VR401	87-NB7-602-010		VR,RTRY 10KAX1 1V<HS>
	PT C.B			
	C1	87-010-387-080		CAP,E 470-25 SME<HA,HS>
	C31	87-010-403-080		CAP, ELECT 3.3-50V<HA,HS>
	C183	87-010-387-080		CAP, ELECT 470-25 M<U,EZ,K>
	C184	87-010-403-080		CAP, ELECT 3.3-50V<U,EZ,K>
	C185	87-018-209-080		CAP, TC U 0.1-50 ZF<EZ,K>
	CN1	87-A61-110-010		CONN,9P V TID-A<HA>
	CN1	87-A61-109-010		CONN,7P V TID-A<HS>
⚠	PT1	8A-NFA-606-010		PT,ANF-A HR<HS>
⚠	PT1	8A-NFA-608-010		PT,ANF-A EZ<EZ,K>
⚠	PT1	8A-NFA-609-010		PT,ANF-A LH<HA>
⚠	PT1	8A-NFZ-610-010		PT,ANF-Z U30<U>
⚠	PT2	8A-NF8-673-010		PT,SUB ANF-8 (H)KAMI<HA,HS>
⚠	PT181	8A-NF8-661-010		PT,SUB ANF-8 (U)<U>
⚠	PT181	8A-NF8-662-010		PT,SUB ANF-8 (E)<EZ,K>
⚠	RY1	87-A91-281-010		RELAY,AC DC12V OSA-SS-212DM5<HA,HS>
⚠	RY181	87-A90-976-010		RELAY,AC12V SDT-S-112LMR<U,EZ,K>
⚠	S1	87-A90-165-010		SW,SL 1-2-3 SWS2301<HA>
⚠	T1	87-A60-317-010		TERMINAL, 1P MSC<HA,HS>
⚠	T2	87-A60-317-010		TERMINAL, 1P MSC<HA,HS>
⚠	T181	87-A60-317-010		TERMINAL, 1P MSC<U,EZ,K>
⚠	T182	87-A60-317-010		TERMINAL, 1P MSC<U,EZ,K>
	WH181	87-A90-460-010		HLDR,WIRE 2.5-7P<U,EZ,K>

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

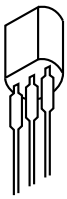
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

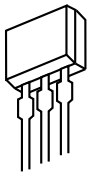
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



E C B

CSA952
CSC4115
KTA1266
KTC3198
KTC3199

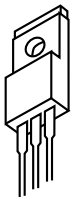


S D G

2SJ460
2SK2541

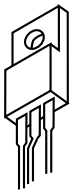
E C B

DTC114ES



B C E

2SB1342
2SB1370
2SD1933



B C E

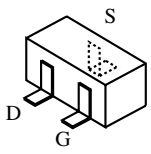
2SC3331

E B C

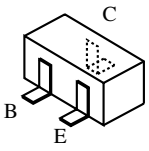
2SA1981

E C B

CC5551



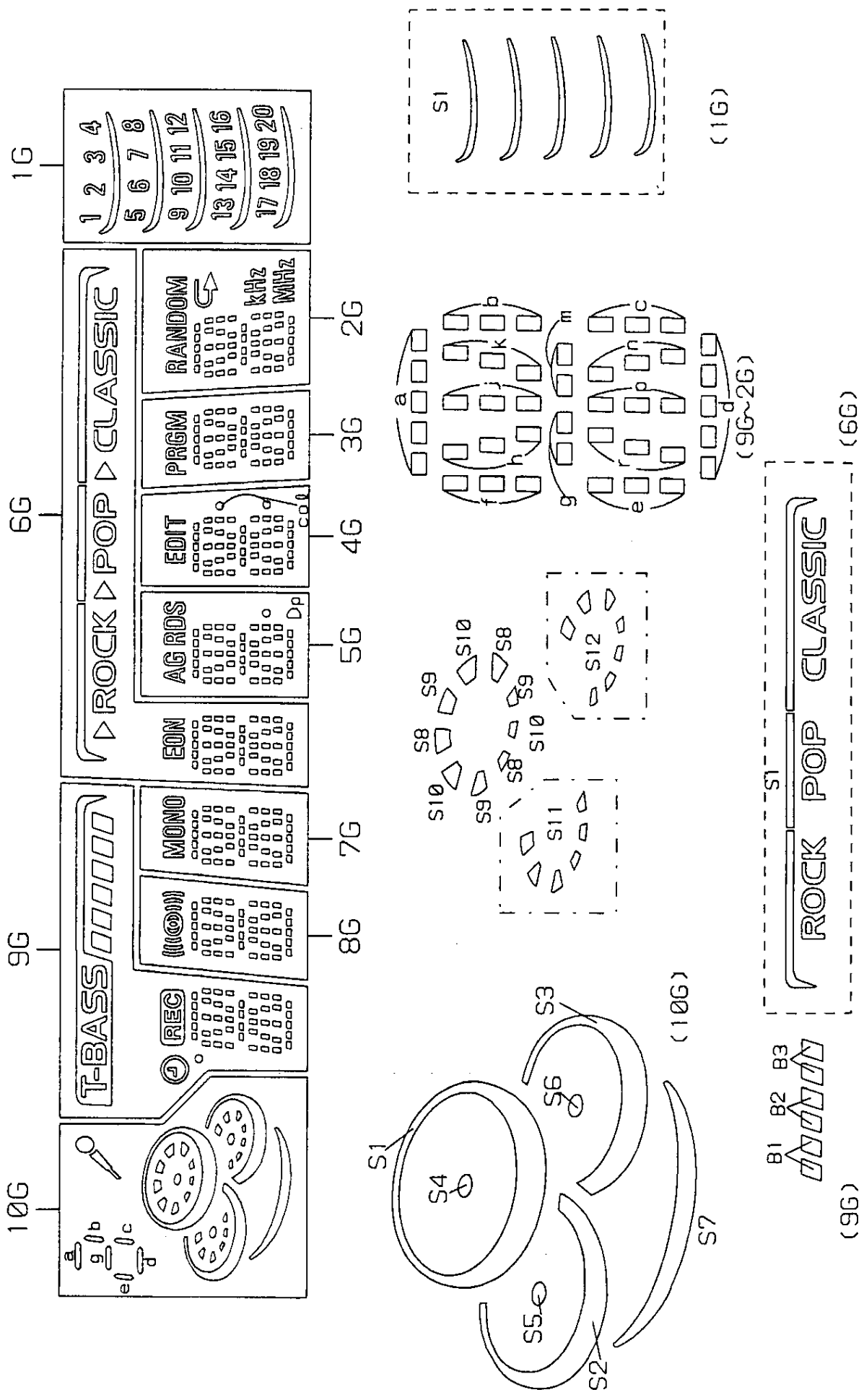
2SK360



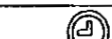
2SA1235
2SC2714
2SC3052
CSD1306
CMBT5401
CMBT5551
KRA102
KRA107
KRC102
KRC104

FL (10-BT-224GNK) GRID ASSIGNMENT AND ANODE CONNECTION

GRID ASSIGNMENT



ANODE CONNECTION

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	–	d	d	d	d	d	d	d	d	20
P2	S7	n	n	n	n	n	n	n	n	19
P3	–	p	p	p	p	p	p	p	p	18
P4	S11	r	r	r	r	r	r	r	r	17
P5	S5	e	e	e	e	e	e	e	e	16
P6	S2	c	c	c	c	c	c	c	c	15
P7	S12	g	g	g	g	g	g	g	g	14
P8	S6	m	m	m	m	m	m	m	m	13
P9	S3	f	f	f	f	f	f	f	f	12
P10	S10	b	b	b	b	b	b	b	b	11
P11	S9	k	k	k	k	k	k	k	k	10
P12	S8	j	j	j	j	j	j	j	j	9
P13	S4	h	h	h	h	h	h	h	h	8
P14	S1	a	a	a	a	a	a	a	a	7
P15	–			MONO	EON	Dp	col (下)	–	MHz	6
P16	–	REC	–	–	–	AG	col (上)	–	kHz	5
P17			–	–	▷ (CLASSIC)	RDS	EDIT	PRGM		4
P18	a, d, g	BASS	–	–	▷ (ROCK)	–	–	–	–	3
P19	b	B1	–	–	▷ (POP)	–	–	–	–	2
P20	c	B2	–	–	S1	–	–	–	RANDOM	1
P21	e	B3	–	–	–	–	–	–	–	S1

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

A MAIN C.B <U>

TO CD MECHANISM AZG-1
FC602
CN602

TO DECK2
CON301
TO CN301

TO DECK1
CON351
TO CN351

J831
ANTENNA
AM LOOP
FM 75Ω

VIDEO/AUX

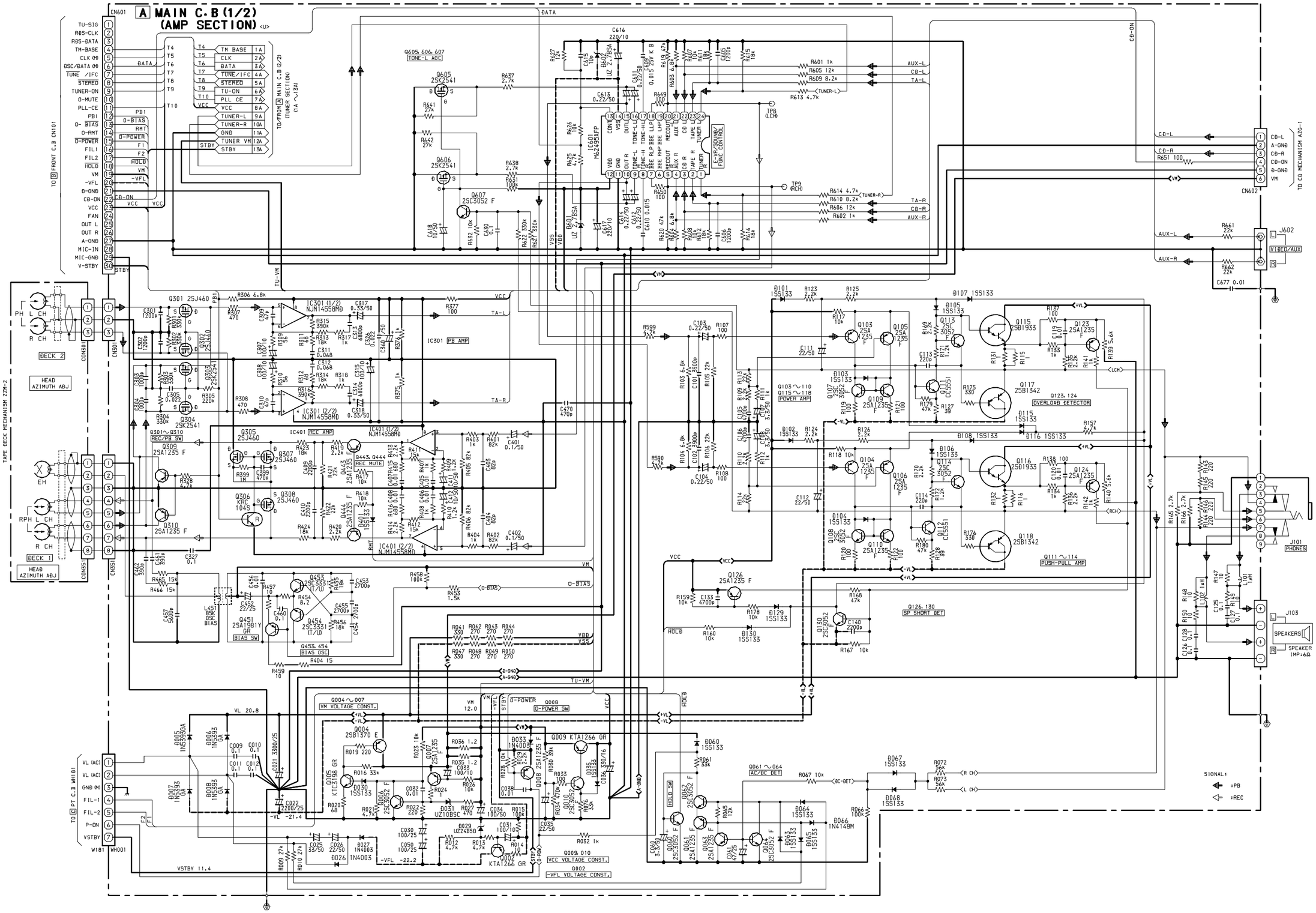
TO CPT C.B
WH181
W181
WH001

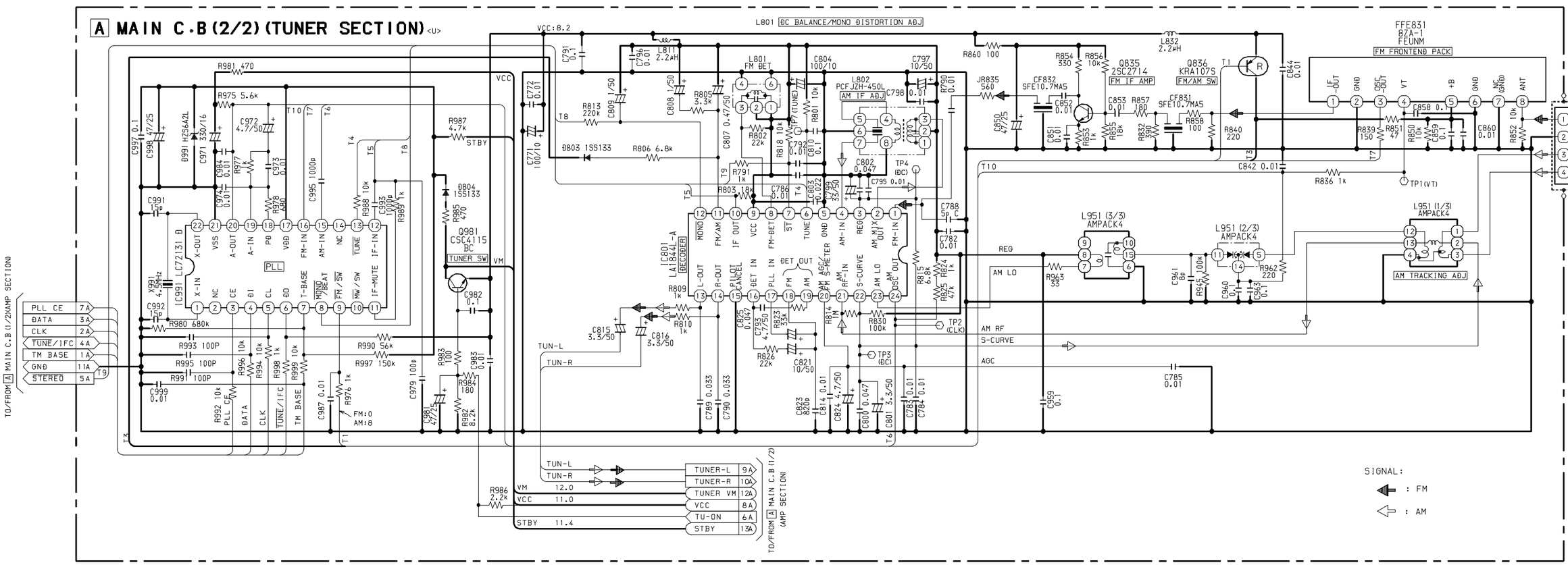
J103
SPEAKERS
SPEAKER IMP:6Ω

J101
PHONES

TO FRONT C.B
CN701
CN601

SCHEMATIC DIAGRAM – 1 (MAIN 1 / 2 : AMP SECTION) <U>




A MAIN C.B (2/2) (TUNER SECTION) <U>
L801 DC BALANCE/MONO DISTORTION ADJ
VCC:8.2
FFE831 8ZA-1 FEUNM
FM FRONTEND PACK
IC801 LA18441-A DECODER
IC991 LC72131 D
PLL
Q981 CSC4115 BC
TUNER SW
Q835 2SC2714 FM IF AMP
Q836 KRA1075 FM/AM SW
L802 PCFJZH-450L AM IF ADJ
L951 (3/3) AMPACK4
L951 (2/3) AMPACK4
L951 (1/3) AMPACK4
AM TRACKING ADJ
J831 ANTENNA
TF FM 75 Ω
AM LOOP
TP1(VT)
TP2 (CLK)
TP3 (DC)
TP4 (DC)
AM RF
S-CURVE
AGC
REG
AM LO
TUN-L
TUN-R
VM 12.0
VCC 11.0
STBY 11.4
PLL CE 7A
DATA 3A
CLK 2A
TUNE/IFC 4A
TM BASE 1A
GND 11A
STEREO 5A
TO/FROM A MAIN C.B (1/2) AMP SECTION
TUNER-L 9A
TUNER-R 10A
TUNER VM 12A
VCC 8A
TU-ON 6A
STBY 13A
TO/FROM A MAIN C.B (1/2) (AMP SECTION)
SIGNAL:
: FM
: AM

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

A MAIN C.B <HA>

TO CD MECHANISM AZG-1
FC602 6 5 3 1
CN602

TO DECK2
CON301 3 1
TO CN301

TO DECK1
CON351 8 7 5 3 1
TO CN351

J831 ANTENNA
AM LOOP
FM 75Ω

J602 VIDEO/AUX R L

J203 SPEAKERS
SPEAKER IMP:6Ω

TO PT C.B CN1 CNA001 WHT 1 3 5 7 9

WH001

TO FRONT C.B CN701 CN601 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

J101 PHONES

IC101 IC401 IC601 IC801 IC991

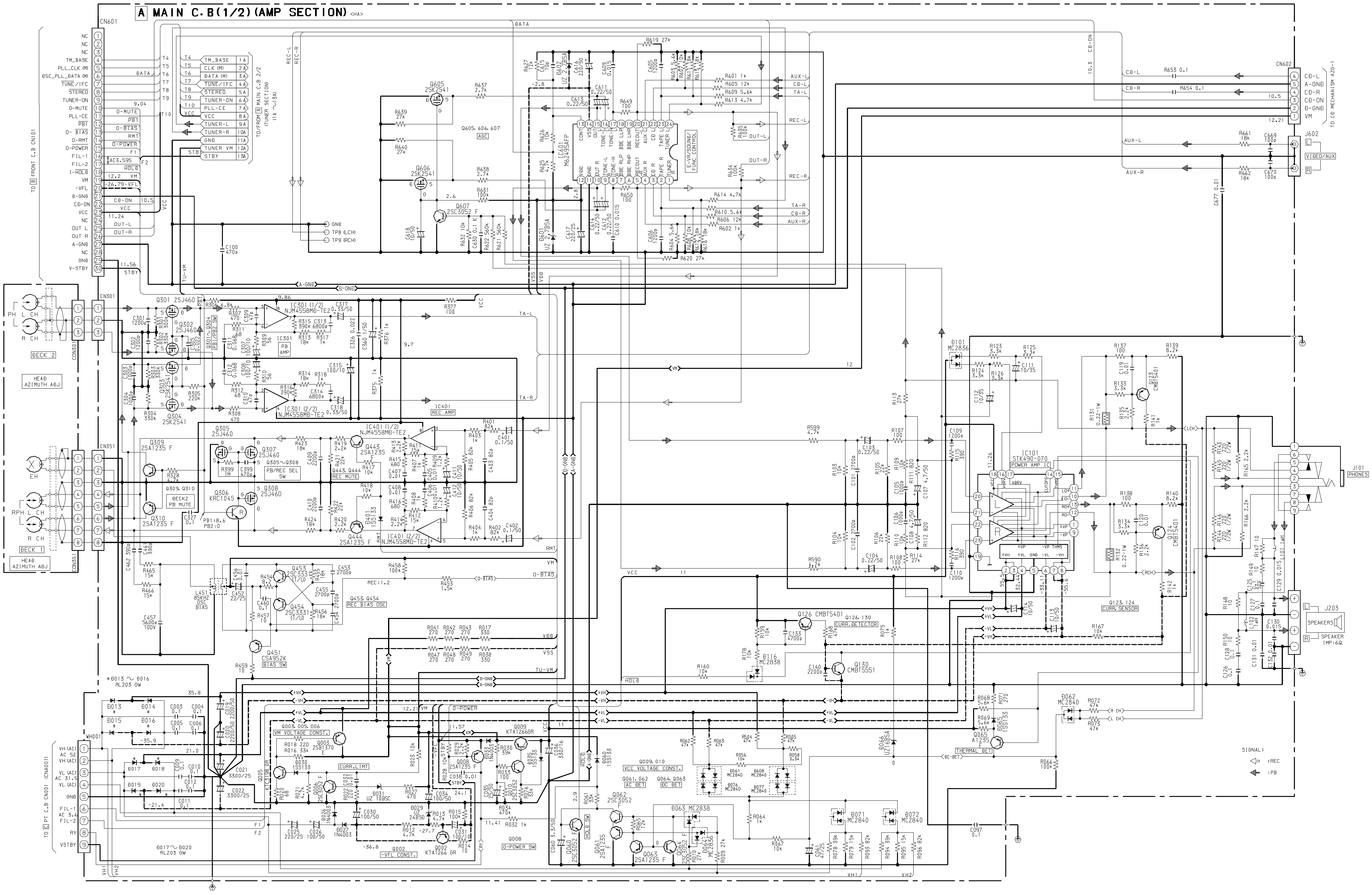
CF831 CF832 FFE831 L951 L451 L801 L802 L811 L832 L962 L971 L972 L101 L102

CN301 CN351

Q302 Q303 Q304 Q305 Q306 Q307 Q308 Q309 Q401 Q443 Q451 Q453 Q454 Q601 Q602 Q603 Q604 Q605 Q606 Q607 Q835 Q836 Q981 Q991

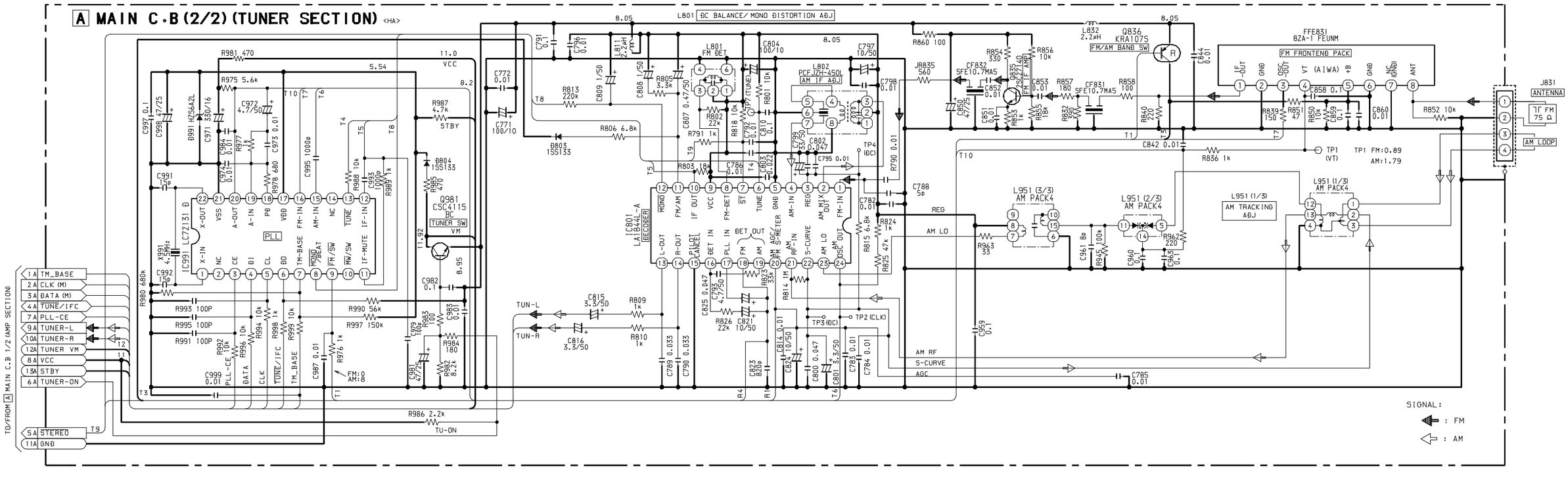
D013 D014 D015 D016 D017 D018 D019 D020 D026 D027 D029 D030 D031 D033 D035 D060 D062 D065 D066 D077 D101 D116 D401 D601 D602 D803 D804

SCHEMATIC DIAGRAM – 3 (MAIN 1 / 2 : AMP SECTION) <HA>



A MAIN C.B(1/2)(AMP SECTION) <HA>
CN601
NC
NC
NC
TM_BASE
PLL_CLK (M)
DSC_PLL_DATA (M)
TUNE/IFC
STEREO
TUNER-ON
O-MUTE
PLL-CE
PB1
O-BIAS
O-RMT
O-POWER
FIL-1
FIL-2
I-HOLD
VM
-VFL
D-GND
CD-ON
VCC
NC
OUT L
OUT R
A-GND
NC
GND
V-STBY
TO B FRONT C.B CN101
TO/FROM A MAIN C.B 2/2 (TUNER SECTION) (1A ~ 13A)
TM_BASE
CLK (M)
DATA (M)
TUNE/IFC
STEREO
TUNER-ON
PLL-CE
VCC
TUNER-L
TUNER-R
GND
TUNER VM
STBY
GND
TP8 (LCH)
TP9 (RCH)
Q605 2SK2541
Q606 2SK2541
Q607 2SC3052 F
Q605, 606, 607
AGC
IC601
M62495AFP
E-VR/SOUND/FUNC CONTROL
CN602
CD-L
A-GND
CD-R
CD-ON
D-GND
VM
TO CD MECHANISM AZG-1
J602
VIDEO/AUX
AUX-L
AUX-R
TAPE DECK MECHANISM ZZM-2
DECK 2
DECK 1
HEAD AZIMUTH ADJ
CN301
CN351
CON301
CON351
PH L CH
R CH
EH
RPH L CH
Q301 2SJ460
Q302 2SJ460
Q303 2SK2541
Q304 2SK2541
Q301~Q304 PB1/PB2 SW
IC301 (1/2) NJM4558MD-TE2
IC301 (2/2) NJM4558MD-TE2
IC301
PB AMP
IC401
REC AMP
IC401 (1/2) NJM4558MD-TE2
IC401 (2/2) NJM4558MD-TE2
Q305 2SJ460
Q307 2SJ460
Q308 2SJ460
Q305~Q308
PB/REC SEL SW
Q306 KRC104S
Q309 2SA1235 F
Q310 2SA1235 F
Q309, Q310
DECK2 PB MUTE
Q443 2SA1235
Q444 2SA1235 F
Q443, Q444
REC MUTE
D401 1SS133
Q453 2SC3331 (T/U)
Q454 2SC3331 (T/U)
Q453, Q454
REC BIAS OSC
L451 85KHZ OSC BIAS
Q451 CSA952K
BIAS SW
*D013 ~ D016
RL203 GW
D017 ~ D020
RL203 GW
WH001
VH (AC)
AC 52
VH (AC)
VL (AC)
AC 31.5
VL (AC)
GND
FIL-1
AC 3.6
FIL-2
RY
VSTBY
TO C PT C.B CN001 (CNA001)
C021 3300/25
C022 3300/25
Q005 KTC3198 GR
Q003, 005, 006
VM VOLTAGE CONST.
Q003 2SB1370 E
CURR.LIMT
Q006 2SC3052 F
Q002 KTA1266 GR
Q002
-VFL CONST.
Q008 2SA1235 F
Q009 KTA1266GR
Q010 2SC3052
Q009, 010
VCC VOLTAGE CONST.
Q008
O-POWER SW
Q060 2SC3052 F
HOLD SW
Q061 2SA1235 F
Q062 2SC3052 F
Q063 2SA1235 F
Q064 2SC3052 F
Q061, 062
AC DET
Q064, Q063
DC DET
D063 MC2838
D064 MC2836
D061 MC2840
D608 MC2840
D076 MC2840
D077 MC2840
D071 MC2840
D072 MC2840
Q126 CMBT5401
Q126, 130
CURR.DETECTOR
Q130 CMBT5551
D116 MC2838
D066 UZ16BSA
D101 MC2836
IC101
STK490-070
POWER AMP IC
Q123 CMBT5401
Q124 CMBT5401
Q123, 124
CURR. SENSOR
Q065 A1235 F
THERMAL DET
D065 1SS133
D062 MC2840
J101
PHONES
J203
SPEAKERS
SPEAKER IMP:6Ω
SIGNAL:
:REC
:PB

SCHEMATIC DIAGRAM – 4 (TUNER SECTION : HA)



32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

A MAIN C.B <HS>

TO CD MECHANISM AZG-1
FC602
CN602

TO DECK2
CON301
TO CN301

TO DECK1
CON351
TO CN351

J831 ANTENNA
AM LOOP
FM 75Ω

J602 VIDEO/AUX

J103 SPEAKERS
SPEAKER IMP:6Ω

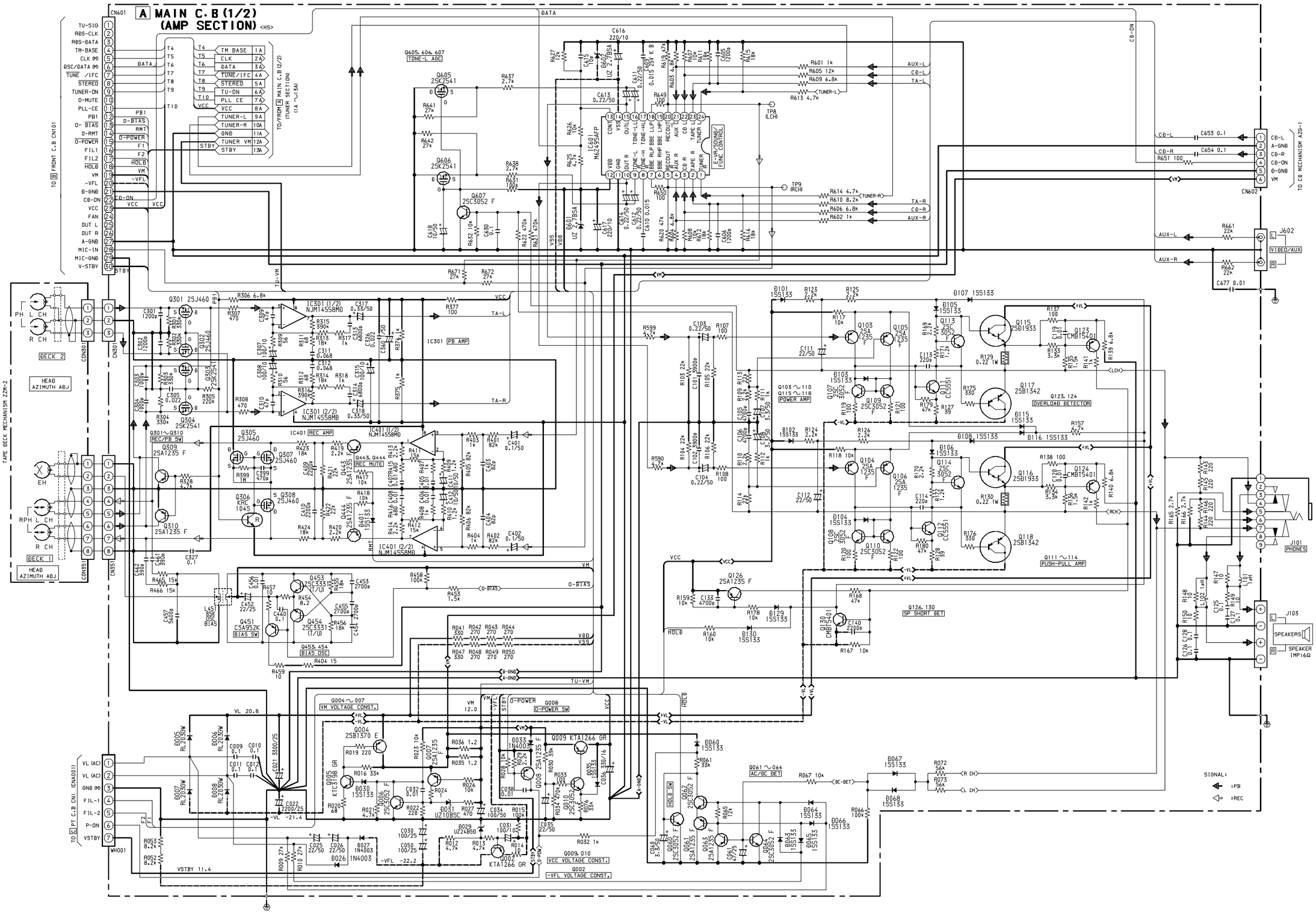
TO CD PT C.B CN1
CNA001

WH001

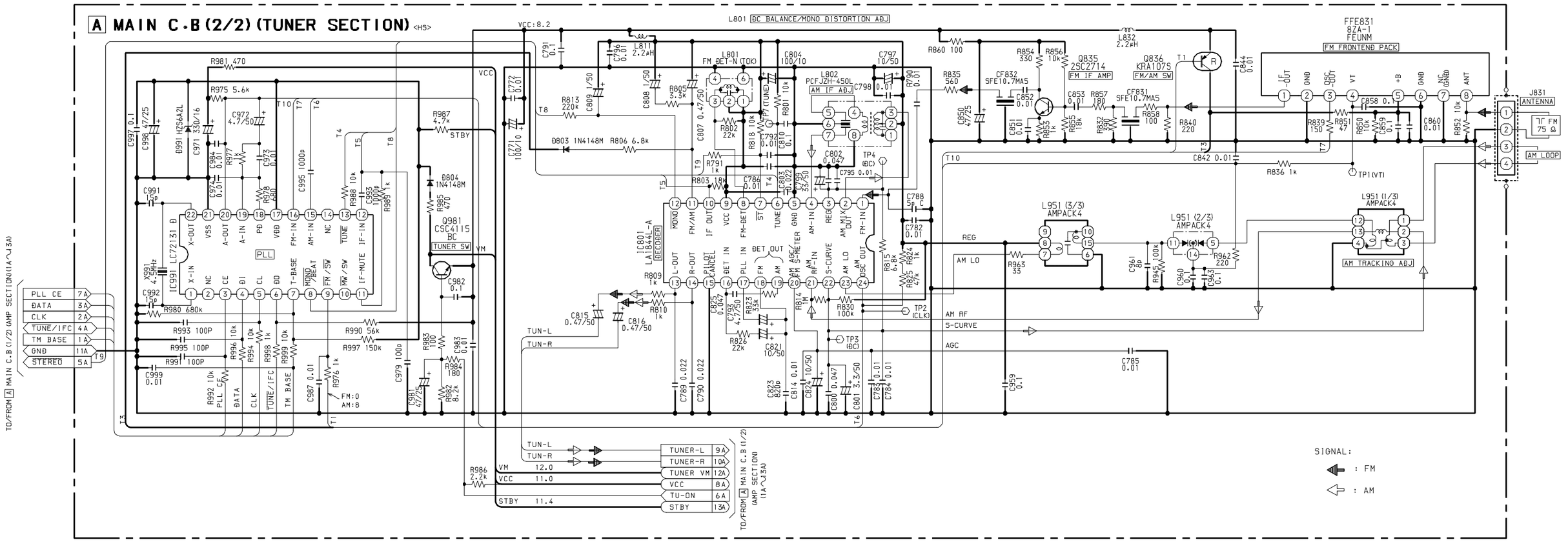
TO B FRONT C.B
CN701

J101 PHONES

SCHEMATIC DIAGRAM – 5 (MAIN 1 / 2 : AMP SECTION) <HS>



SCHEMATIC DIAGRAM – 6 (MAIN 2 / 2 : TUNER SECTION) <HS>



32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

A MAIN C.B <EZ, K>

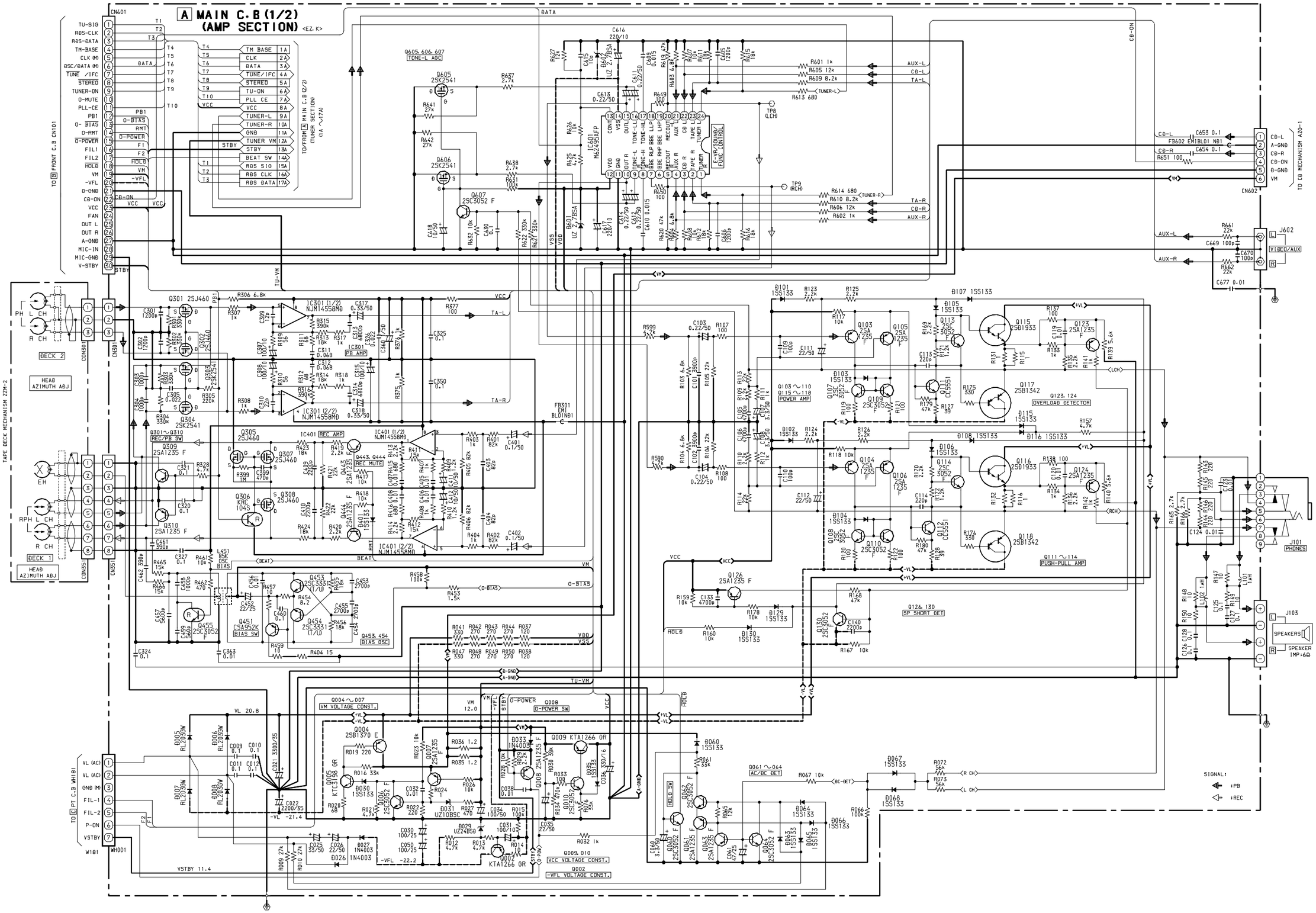
TO CĐ MECHANISM AZG-1
FC602 6 5 3 1
CN602

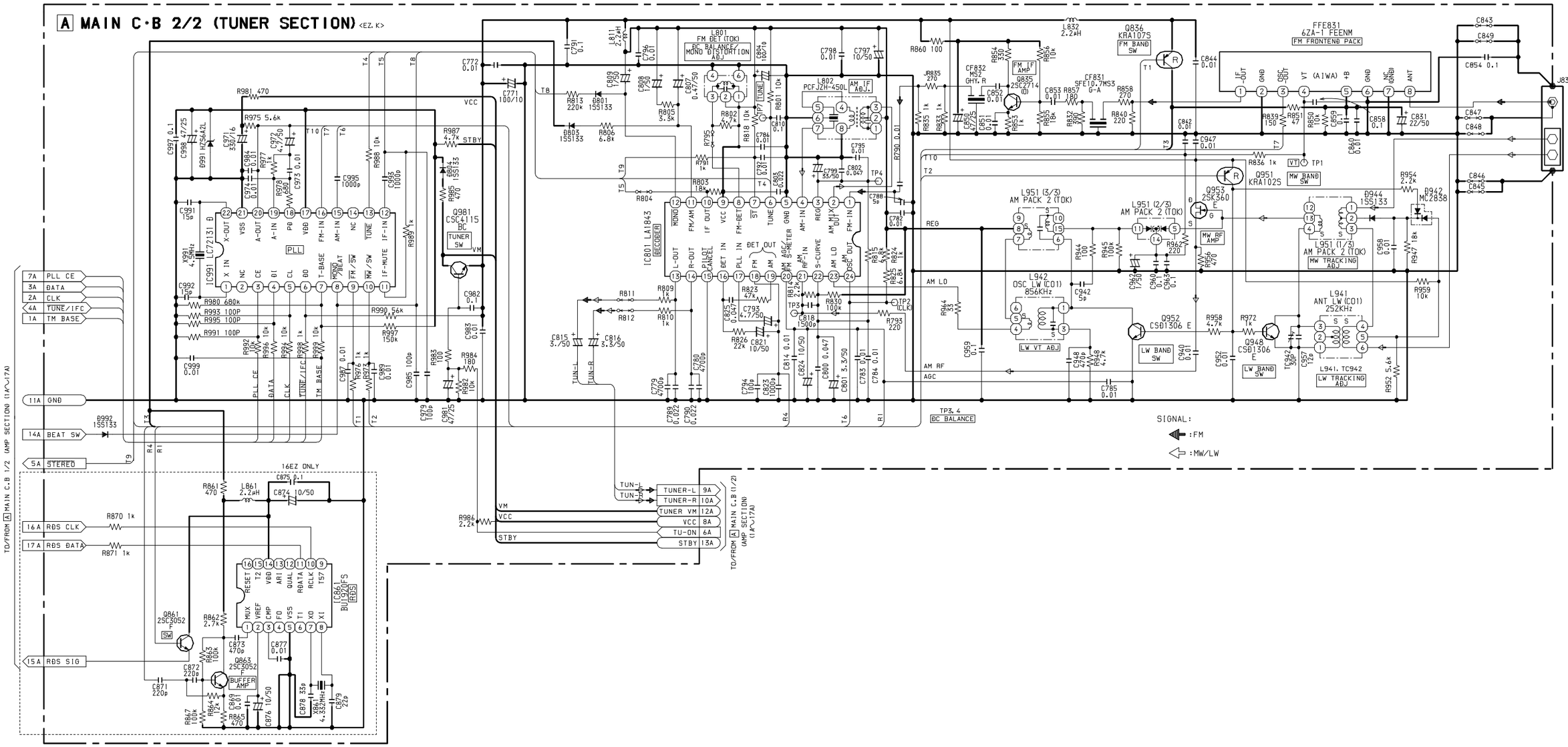
TO ĐECK2
CON301 3 1
TO CN301

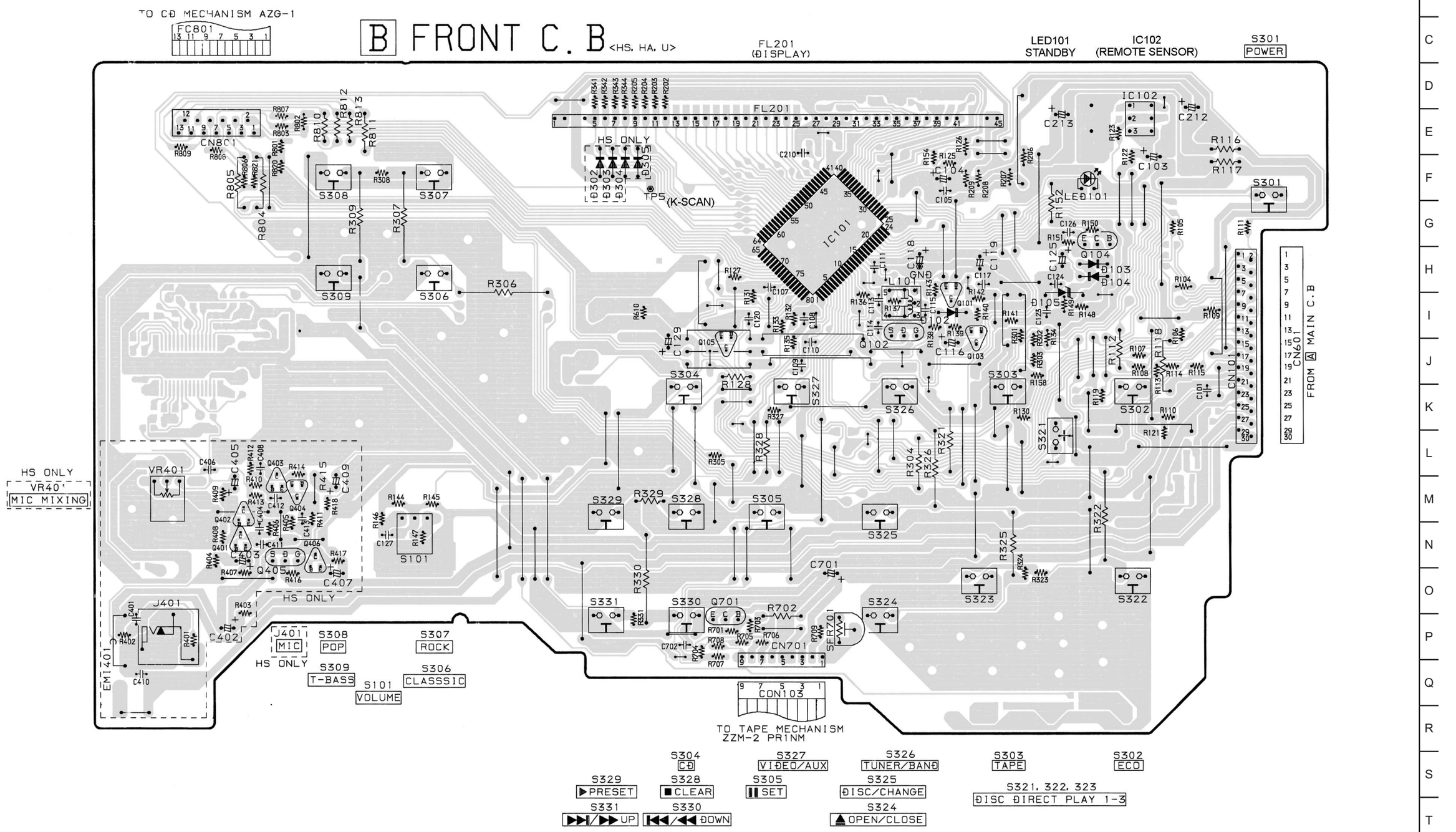
TO ĐECK1
CON351 8 7 5 3 1
TO CN351

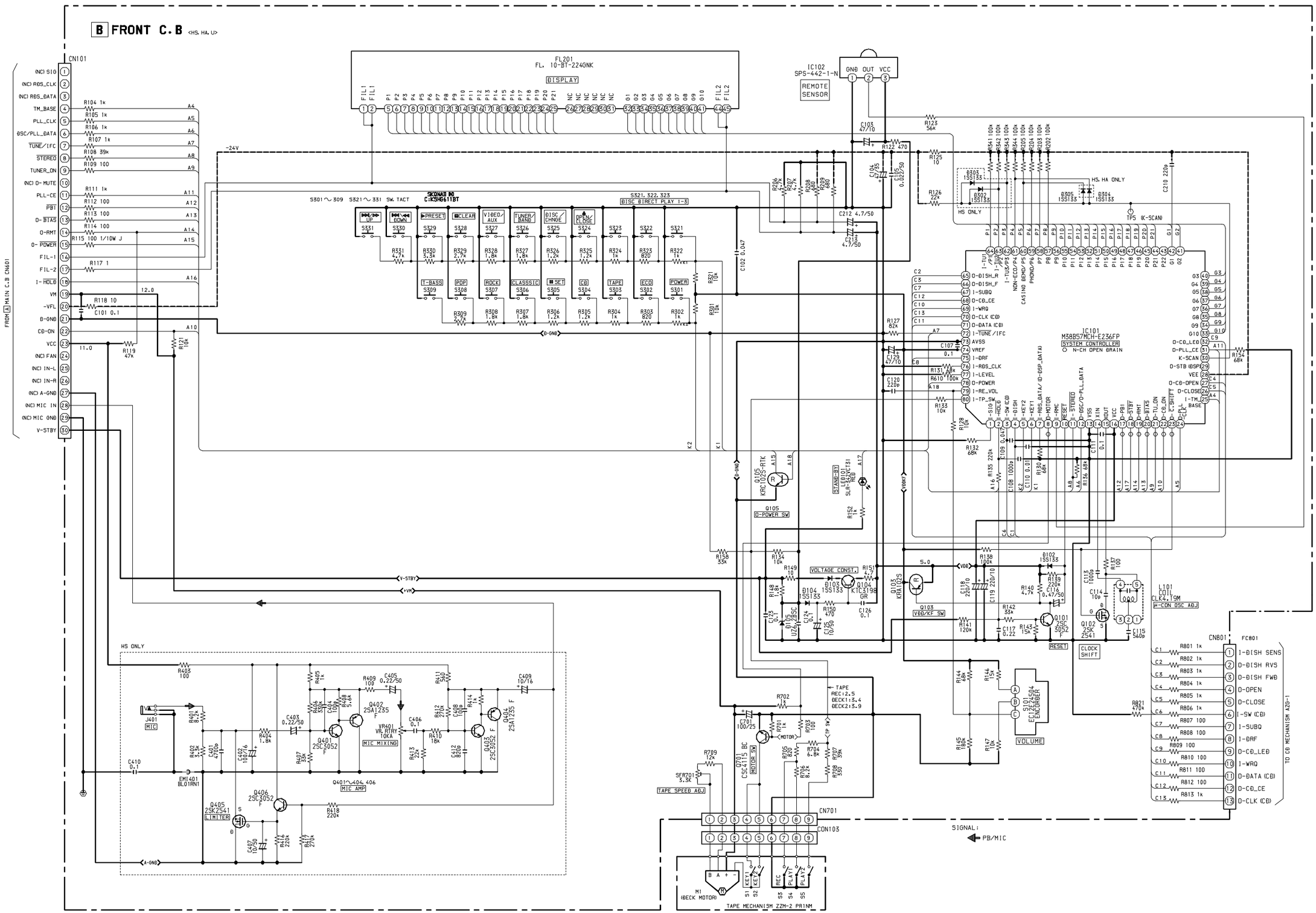
J832 ANTENNA
MW/LW LOOP
JFM 75Ω
VIĐEO/AUX R L
J602
J103 R L
SPEAKERS
SPEAKER IMP:6Ω
J101 PHONES
TO B FRONT C.B
CN701 CN601
TO C PT C.B WH181 W181 1 WHT 3 5 7
WH001
TP1 TP2 TP3 TP4 TP5 TP8 (LCH) TP9 (RCH)
FFE831 TP1
GND
16EZ ONLY

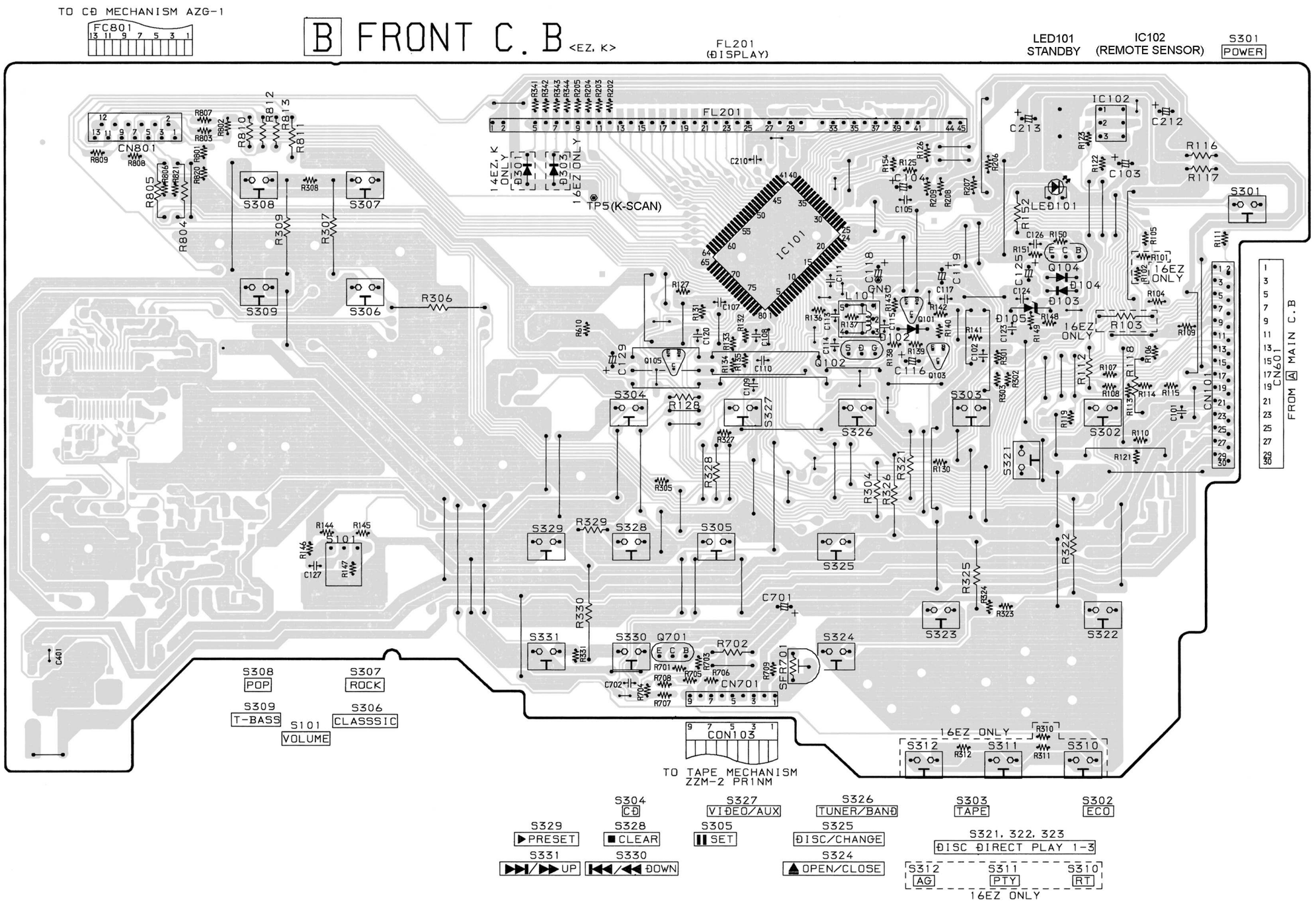
SCHEMATIC DIAGRAM – 7 (MAIN 1 / 2 : AMP SECTION)<EZ, K>

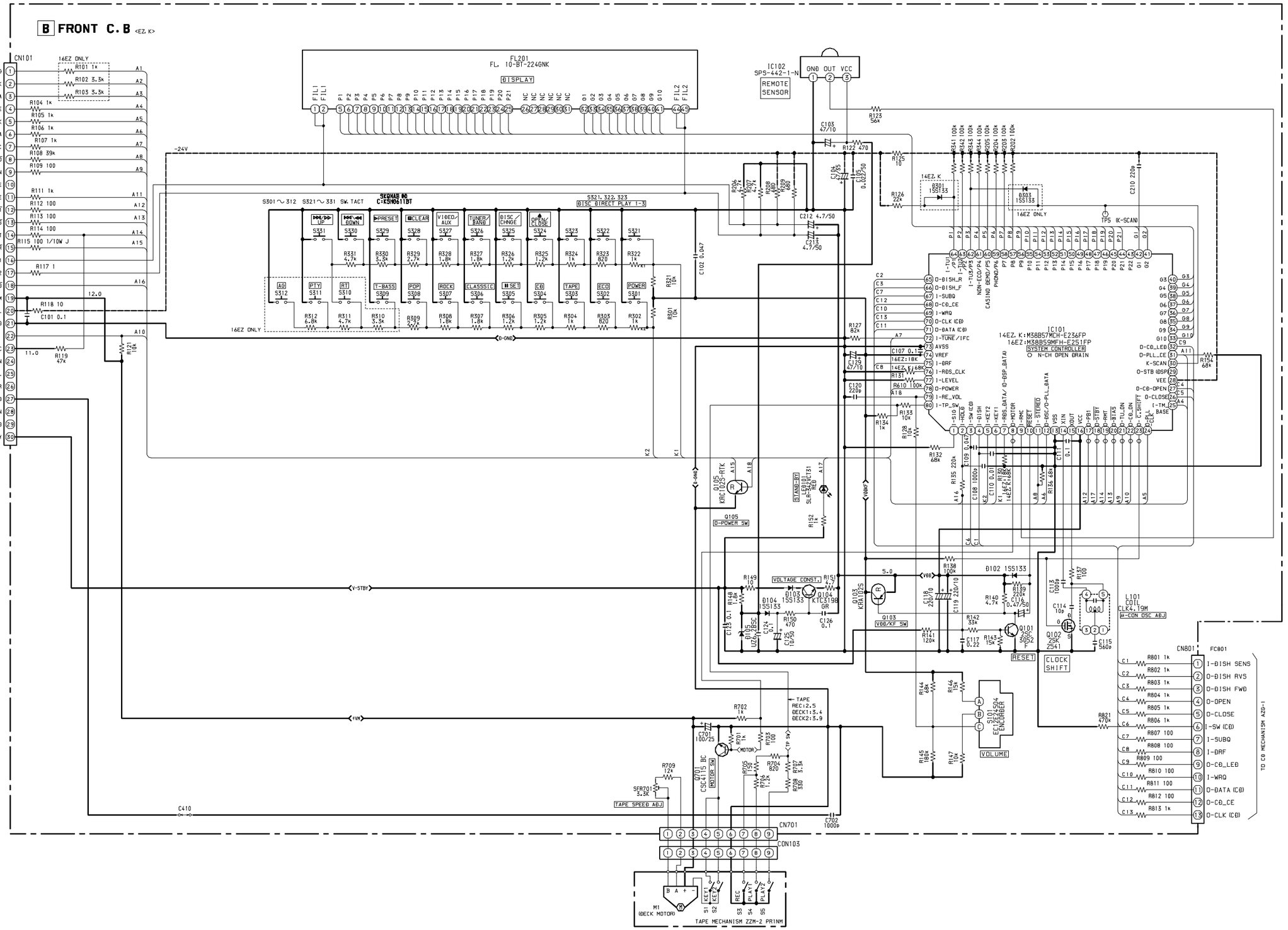


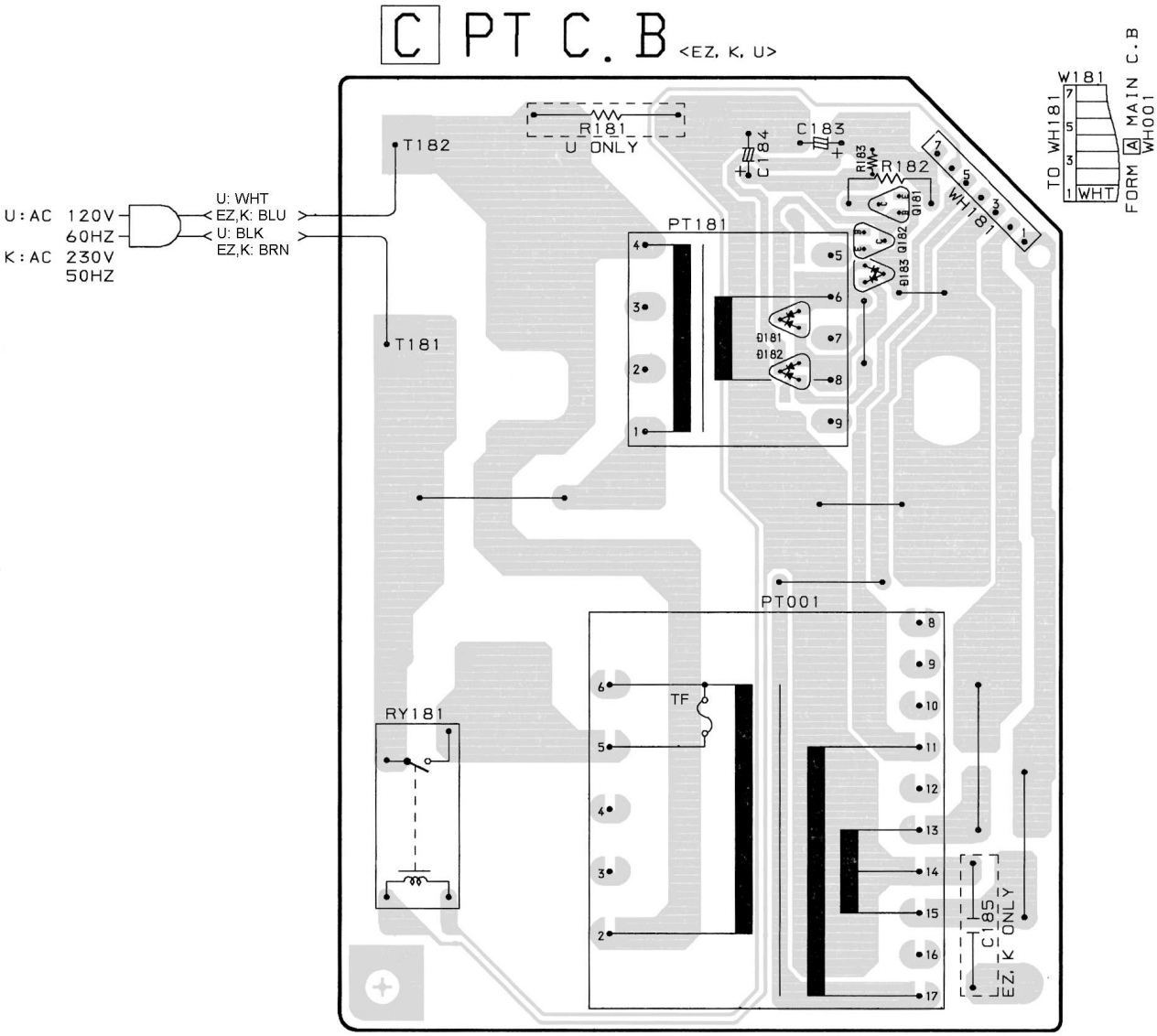

A MAIN C·B 2/2 (TUNER SECTION) <EZ, K>
7A PLL CE
3A DATA
2A CLK
4A TUNE/IFC
1A TM BASE
11A GND
14A BEAT SW
5A STEREO
16A RDS CLK
17A RDS DATA
15A RDS SIG
TO/FROM A MAIN C.B 1/2 (AMP SECTION) (14A~17A)
16EZ ONLY
IC991 LC72131 D
PLL
IC801 LA1843
DECODER
Q981 CSC4115 BC
TUNER SW
Q861 2SC3052 F
SW
Q863 2SC3052 F
BUFFER AMP
IC961 LC7461 BU1923FS
RDS
L801 FM DET (TOK)
DC BALANCE / MONO DISTORTION ADJ
L802 PCFJ2H-450L
AM IF ADJ.
FM IF AMP
Q835 2SC2714 (D)
Q836 KRA107S
FM BAND SW
FFE831 6ZA-1 FEENM
FM FRONTEND PACK
Q951 KRA1025
MW BAND SW
Q952 2SK560
MW RF AMP
L951 (3/3) AM PACK 2 (TOK)
L951 (2/3) AM PACK 2 (TOK)
L951 (1/3) AM PACK 2 (TOK)
MW TRACKING ADJ
L942 OSC LW (CO1) 856KHz
LW VT ADJ
Q952 CSD1306 E
LW BAND SW
Q948 CSD1306 E
L941 ANT LW (CO1) 252KHz
L941, TC942
LW TRACKING ADJ
D944 1SS133
D942 MC2838
J832 ANTENNA
FM 75Ω
MW/LW LOOP
TP1 TP2 TP3, 4 TP4
DC BALANCE
AM LO
AM RF
AGC
REG
SIGNAL:
:FM
:MW/LW
TUNER-L 9A
TUNER-R 10A
TUNER VM 12A
VCC 8A
TU-ON 6A
STBY 13A
VM
VCC
STBY
TO/FROM A MAIN C.B (1/2) (AMP SECTION) (1A~17A)

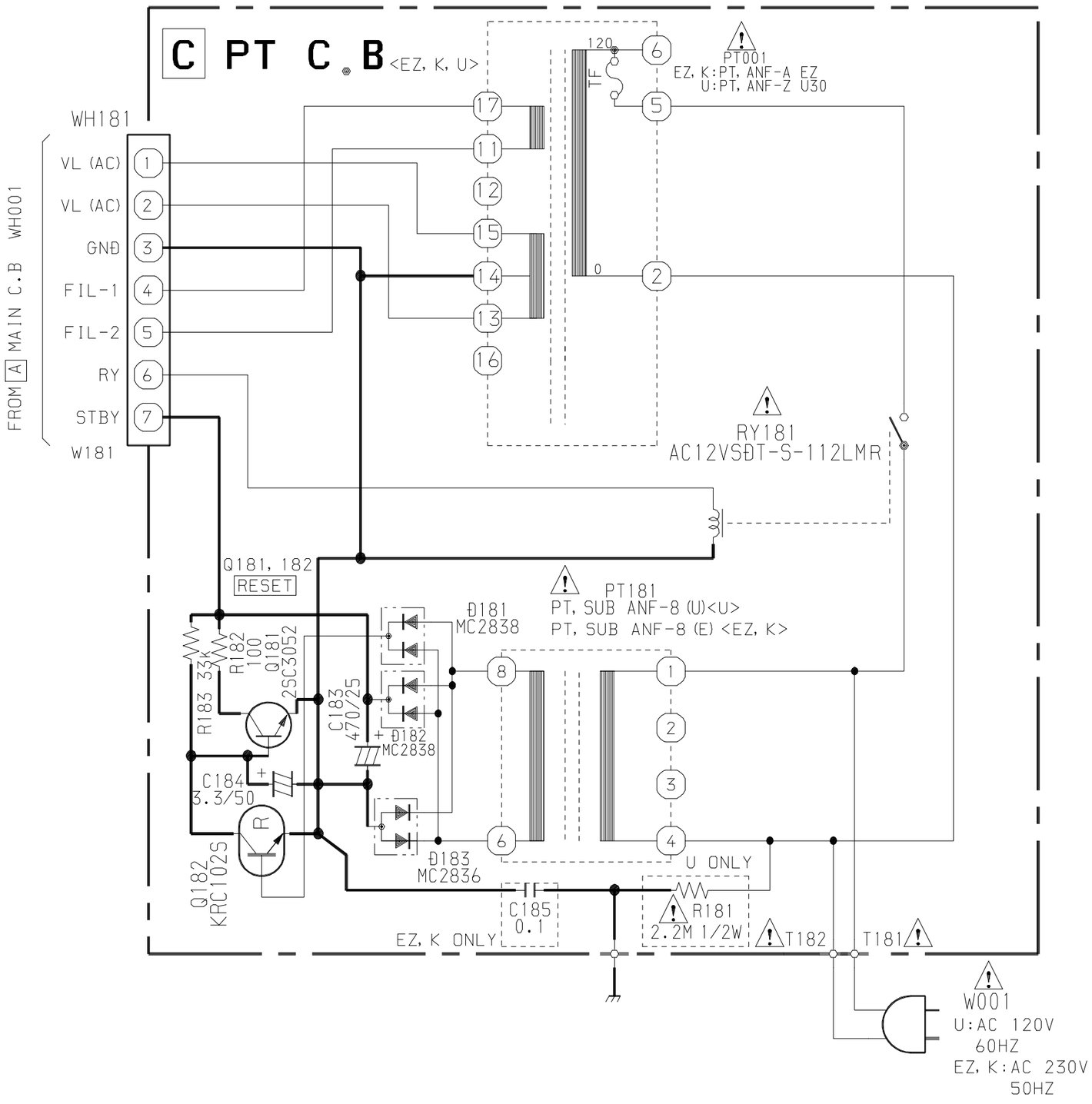

B FRONT C.B <HS, HA, U>
TO CD MECHANISM AZG-1
FC801
FL201 (DISPLAY)
LED101 STANDBY
IC102 (REMOTE SENSOR)
S301 POWER
CN801
HS ONLY
TP5 (K-SCAN)
IC101
IC102
LED101
Q104
D103
D104
D105
L101
Q101
Q102
Q103
S308
S307
S309
S306
R306
S304
S327
S326
S303
S302
S329
S328
S305
S325
S321
S322
S323
S324
S331
S330
Q701
CN701
SFR701
C701
S101
VOLUME
VR401
MIC MIXING
EM1401
J401
MIC
S308 POP
S307 ROCK
S309 T-BASS
S306 CLASSSIC
CON103
TO TAPE MECHANISM ZZM-2 PRINM
CN601
FROM A MAIN C.B
S304 CD
S327 VIDEO/AUX
S326 TUNER/BAND
S303 TAPE
S302 ECO
S329 PRESET
S328 CLEAR
S305 SET
S325 DISC/CHANGE
S321, 322, 323 DISC DIRECT PLAY 1-3
S331 UP
S330 DOWN
S324 OPEN/CLOSE

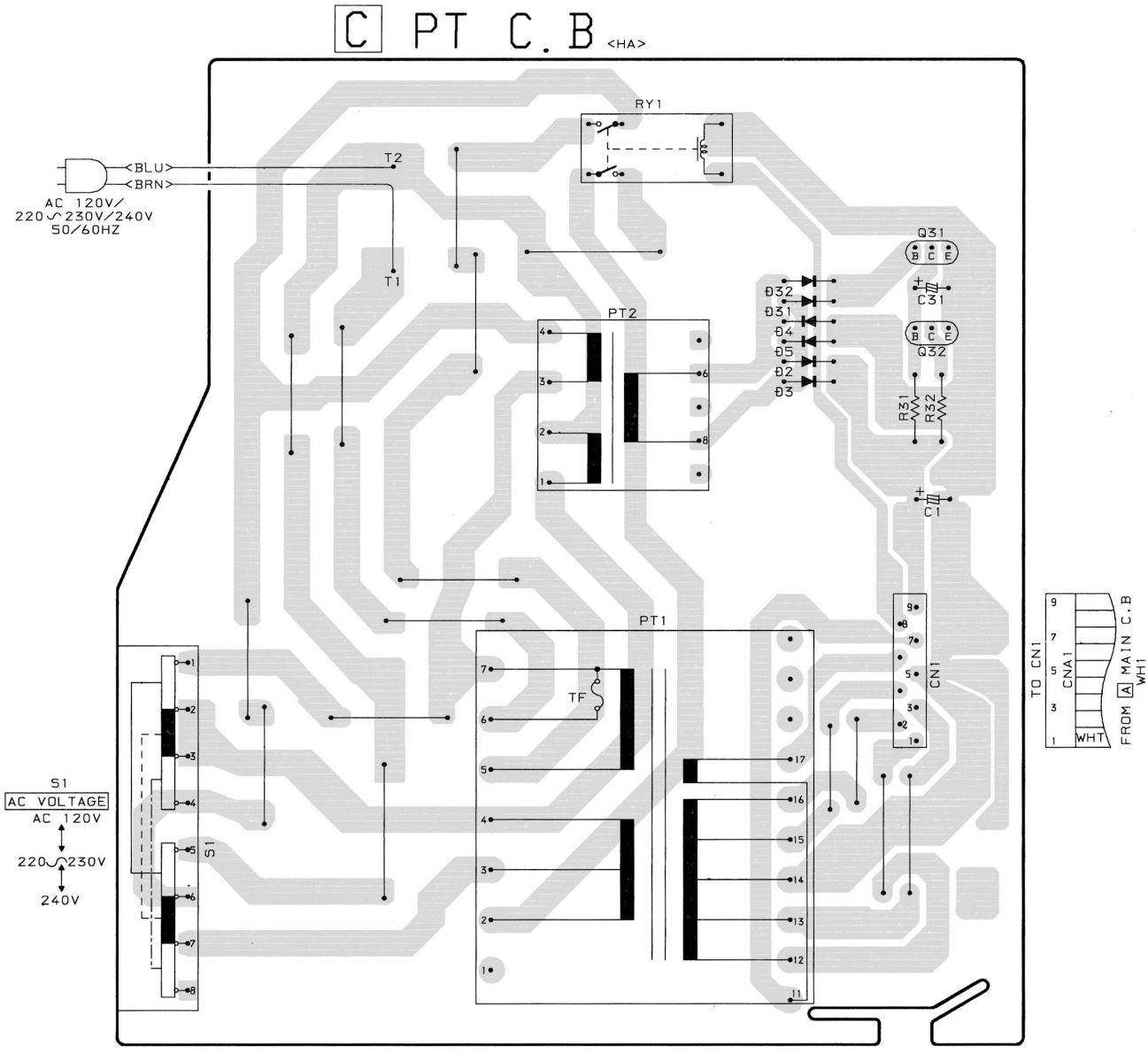

B FRONT C.B <HS, HA, U>
CN101
FROM A MAIN C.B CN601
FL201
FL, 10-BT-224GNK
DISPLAY
IC102
SPS-442-1-N
REMOTE SENSOR
GND OUT VCC
IC101
M38B57MCH-E236FP
SYSTEM CONTROLLER
N-CH OPEN DRAIN
S301 ~ 309 S321 ~ 331 SW. TACT
SKONAB NO
C:KSH6611BT
S321, 322, 323
DISC DIRECT PLAY 1-3
UP
DOWN
PRESET
CLEAR
VIDEO/AUX
TUNER/BAND
DISC CHNGE
OPEN/CLOSE
T-BASS
POP
ROCK
CLASSIC
SET
CD
TAPE
ECO
POWER
HS ONLY
HS, HA ONLY
TP5 (K-SCAN)
Q105
KRC105-RTK
Q105
O-POWER SW
STAND-BY
LED101
SLP-150T31
RED
Q103
KRA106S
Q103
VDD/KF SW
VOLTAGE CONST.
Q104
KTC3198
GR
Q101
2SC3052
F
Q102
2SK
2541
RESET
CLOCK SHIFT
L101
COIL
CLK4.19M
X-CON OSC ADJ
S101
EC12E24504
ENCORDER
VOLUME
TAPE
REC:2.5
DECK1:3.4
DECK2:3.9
TAPE SPEED ADJ
M1
(DECK MOTOR)
TAPE MECHANISM ZZM-2 PR1NM
CN701
CON103
CN801
FC801
TO CD MECHANISM AZ8-1
SIGNAL:
PB/MIC
MIC
MIC MIXING
MIC AMP
Q401~404, 406
LIMITER
Q405
2SK2541
Q406
2SC3052
F
Q401
2SC3052
F
Q402
2SA1235
F
Q404
2SA1235
F
VR401
VR, RTRY
10KA
EMI401
BL01RN1
-24V
V-STBY
+VM
A-GND
D-GND
K1
K2


B FRONT C.B <EZ, K>
TO CD MECHANISM AZG-1
FC801
FL201 (DISPLAY)
LED101 STANDBY
IC102 (REMOTE SENSOR)
S301 POWER
CN801
FL201
14EZ, K ONLY
16EZ ONLY
TP5(K-SCAN)
IC101
LED101
IC102
S308 POP
S307 ROCK
S309 T-BASS
S306 CLASSSIC
S101 VOLUME
CON103
TO TAPE MECHANISM ZZM-2 PR1NM
CN601
FROM A MAIN C.B
CN701
S304 CD
S327 VIDEO/AUX
S326 TUNER/BAND
S303 TAPE
S302 ECO
S329 PRESET
S328 CLEAR
S305 SET
S325 DISC/CHANGE
S321, 322, 323 DISC DIRECT PLAY 1-3
S331 UP
S330 DOWN
S324 OPEN/CLOSE
S312 AG
S311 PTY
S310 RT
16EZ ONLY

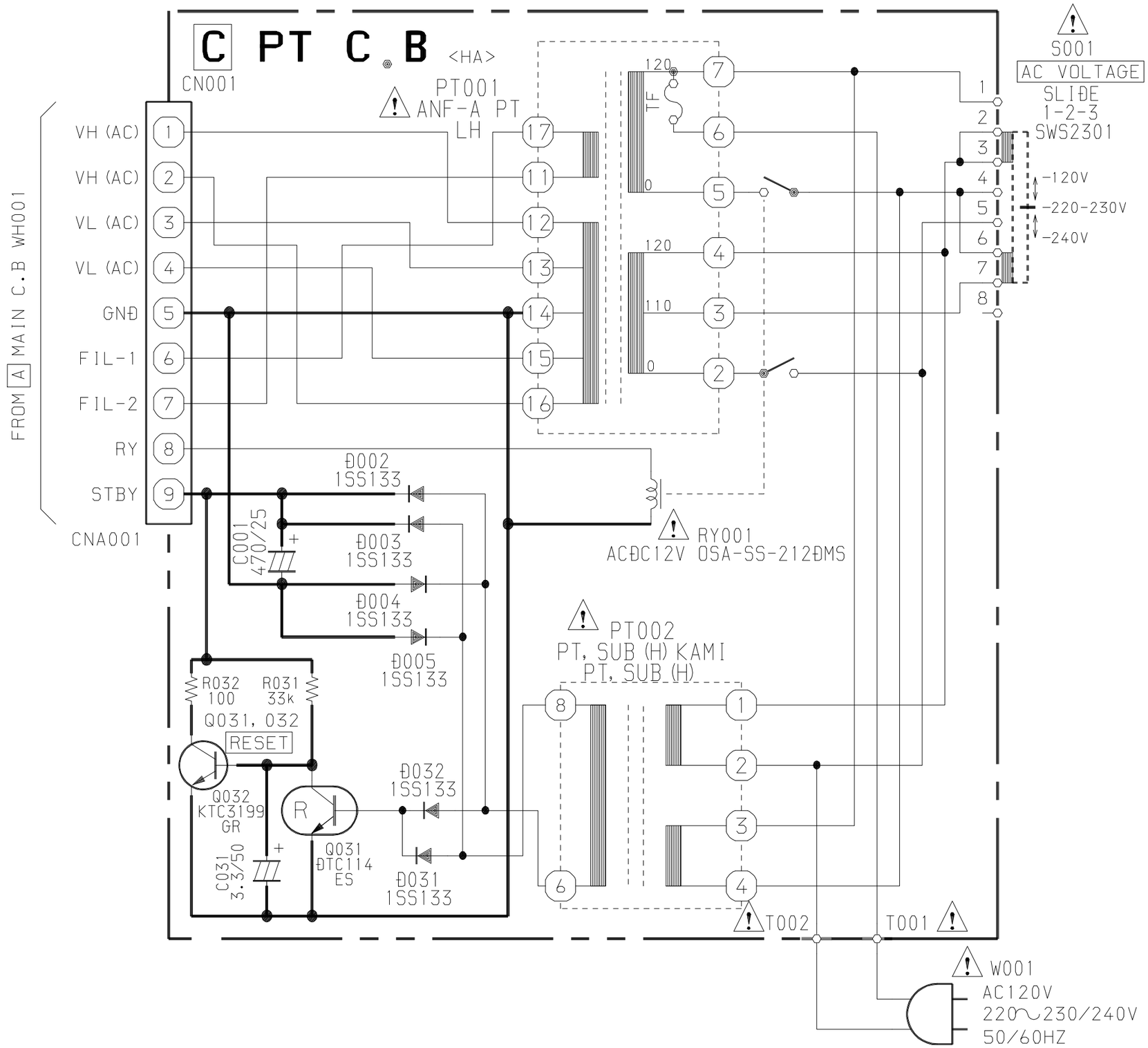

B FRONT C.B <EZ, K>
CN101
16EZ ONLY
R101 1k
R102 3.5k
R103 3.5k
SIO
RDS_CLK
RDS_DATA
TM_BASE
PLL_CLK
BSC/PLL_DATA
TUNE/IFC
STEREO
TUNER_ON
(NC) D-MUTE
PLL-CE
PBT
D-BTAS
D-RMT
D-POWER
FIL-1
FIL-2
I-HOLD
VM
-VFL
D-GND
CD-ON
VCC
(NC) FAN
(NC) IN-L
(NC) IN-R
(NC) A-GND
(NC) MIC IN
(NC) MIC GND
V-STBY
FROM B MAIN C.B CN401
FL201
FL. 10-BT-2249NK
DISPLAY
IC102
SPS-442-1-N
REMOTE SENSOR
GND OUT VCC
-24V
SKQNAB 00
C:KSH0611BT
S301 ~ 312 S321 ~ 331 SW. TACT
S321, 322, 323
DISC DIRECT PLAY 1-3
16EZ ONLY
B-GND
V-STBY
VM
IC101
14EZ, K:M38B57MCH-E236FP
16EZ:M38B59MFH-E251FP
SYSTEM CONTROLLER
N-CH OPEN DRAIN
CASIND BEMD/P5 PHOND/P6
NON-ECO/P4
I-TUN/PS
D-DISH_R
D-DISH_F
I-SUBQ
D-CD_CE
I-WRQ
D-CLK (CB)
D-DATA (CB)
I-TUNE/IFC
AVSS
VREF
I-BRF
I-RDS_CLK
I-LEVEL
D-POWER
I-RE_VOL
I-TP_SW
I-SIO
I-HOLD
I-SW (CB)
I-DISH
I-KEY2
I-KEY1
I-RDS_DATA/ID-BSP_DATA
D-MOTOR
I-RMC
RESET
I-STEREO
D-BSC/D-PLL_DATA
VSS
XIN
XOUT
VCC
D-PBI
D-STBY
D-BUSY
D-BTAS
D-TUN
D-CD_DIN
D-CBSHIFT
D-PLL_CLK
D-CD_LED
D-PLL_CE
K-SCAN
O-STB (BSP)
VEE
D-CD-OPEN
D-CLOSE
(-TM_BASE
TP5 (K-SCAN)
14EZ, K
B301 1SS133
B303 1SS133
16EZ ONLY
Q105 KRC1025-RTK
Q105 D-POWER SW
STAND-BY LED101 SLR-342VC131
Q103 KRA1025
Q103 VOB/XF SW
VOLTAGE CONST.
D102 1SS133
D103 1SS133
D104 1SS133
D105 UZ6.2BSC
Q104 KTC3198 GR
Q101 2SC 3052 F
Q102 2SK 2541
RESET
CLOCK SHIFT
L101 COIL CLK4.19M
A-CON OSC ADJ
S101 EC12E24504 ENCODER
VOLUME
TAPE REC:2.5 DECK1:5.4 DECK2:3.9
Q701 CSC4115 BC
MOTOR SW
SFR701 5.3K
TAPE SPEED ADJ
C410
CN701
CON103
M1 (DECK MOTOR)
TAPE MECHANISM ZZM-2 PRINM
CN801
FC801
TO CB MECHANISM AZG-1
I-DISH SENS
O-DISH RVS
O-DISH FWD
O-OPEN
O-CLOSE
I-SW (CB)
I-SUBQ
I-BRF
O-CD_LED
I-WRQ
O-DATA (CB)
O-CD_CE
O-CLK (CB)

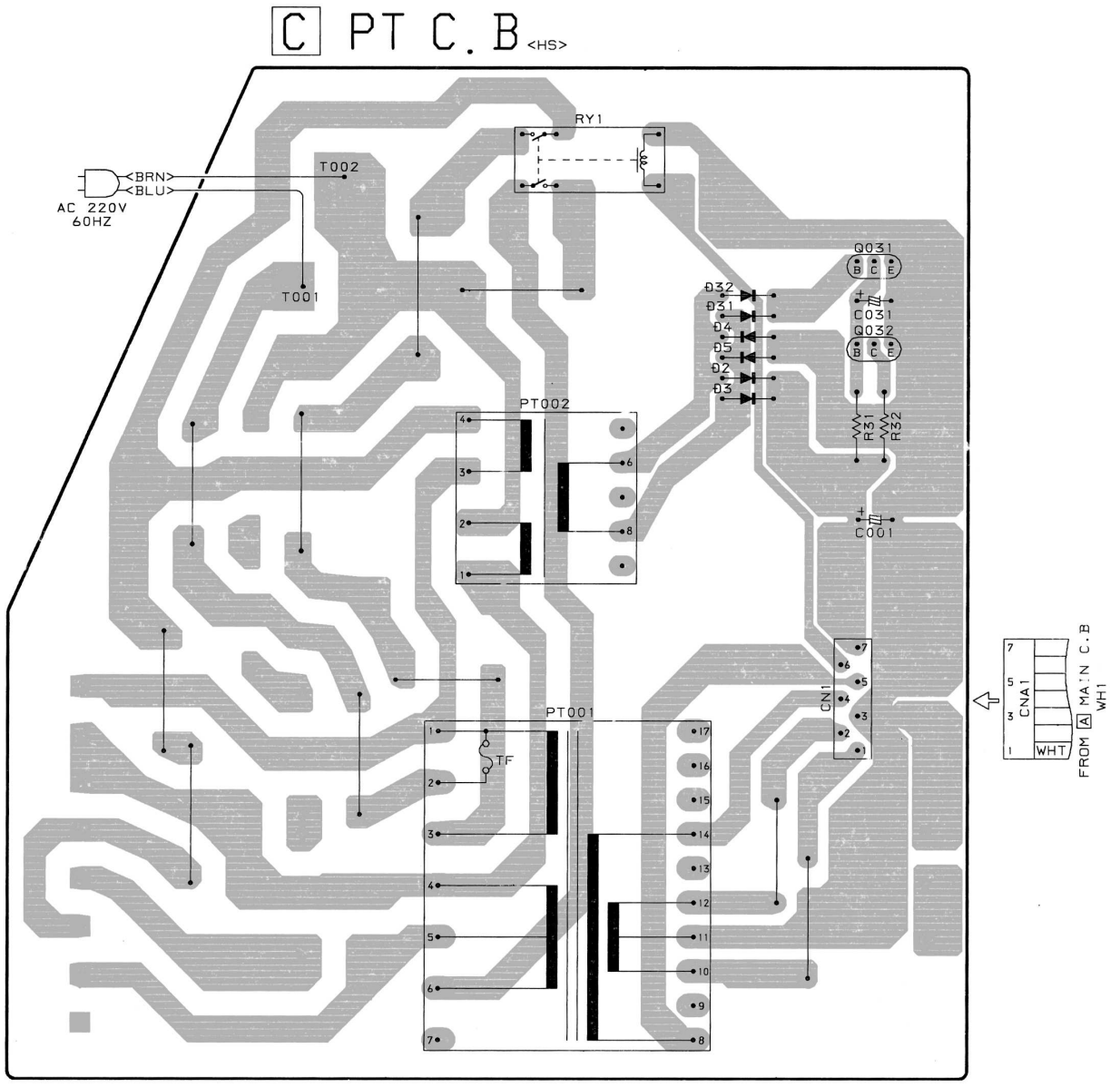

C PT C.B <EZ, K, U>
U : AC 120V 60HZ
K : AC 230V 50HZ
U: WHT
EZ,K: BLU
U: BLK
EZ,K: BRN
T182
T181
R181
U ONLY
C184
C183
R183
R182
Q181
Q182
Q183
PT181
D181
D182
WH181
TO WH181
W181
WHT
FORM A MAIN C.B
WH001
PT001
TF
RY181
C185
EZ, K ONLY


C PT C.B <EZ, K, U>
WH181
VL (AC) 1
VL (AC) 2
GND 3
FIL-1 4
FIL-2 5
RY 6
STBY 7
W181
FROM A MAIN C.B WH001
17
11
12
15
14
13
16
120
TF
0
6
5
2
PT001
EZ, K:PT, ANF-A EZ
U:PT, ANF-Z U30
RY181
AC12VSDT-S-112LMR
Q181, 182
RESET
R183 33k
R182 100
Q181 2SC3052
C183 470/25
C184 3.3/50
Q182 KRC102S
D181 MC2838
D182 MC2838
D183 MC2836
8
6
1
2
3
4
PT181
PT, SUB ANF-8 (U)<U>
PT, SUB ANF-8 (E) <EZ, K>
U ONLY
C185 0.1
EZ, K ONLY
R181 2.2M 1/2W
T182
T181
W001
U:AC 120V
60HZ
EZ, K:AC 230V
50HZ

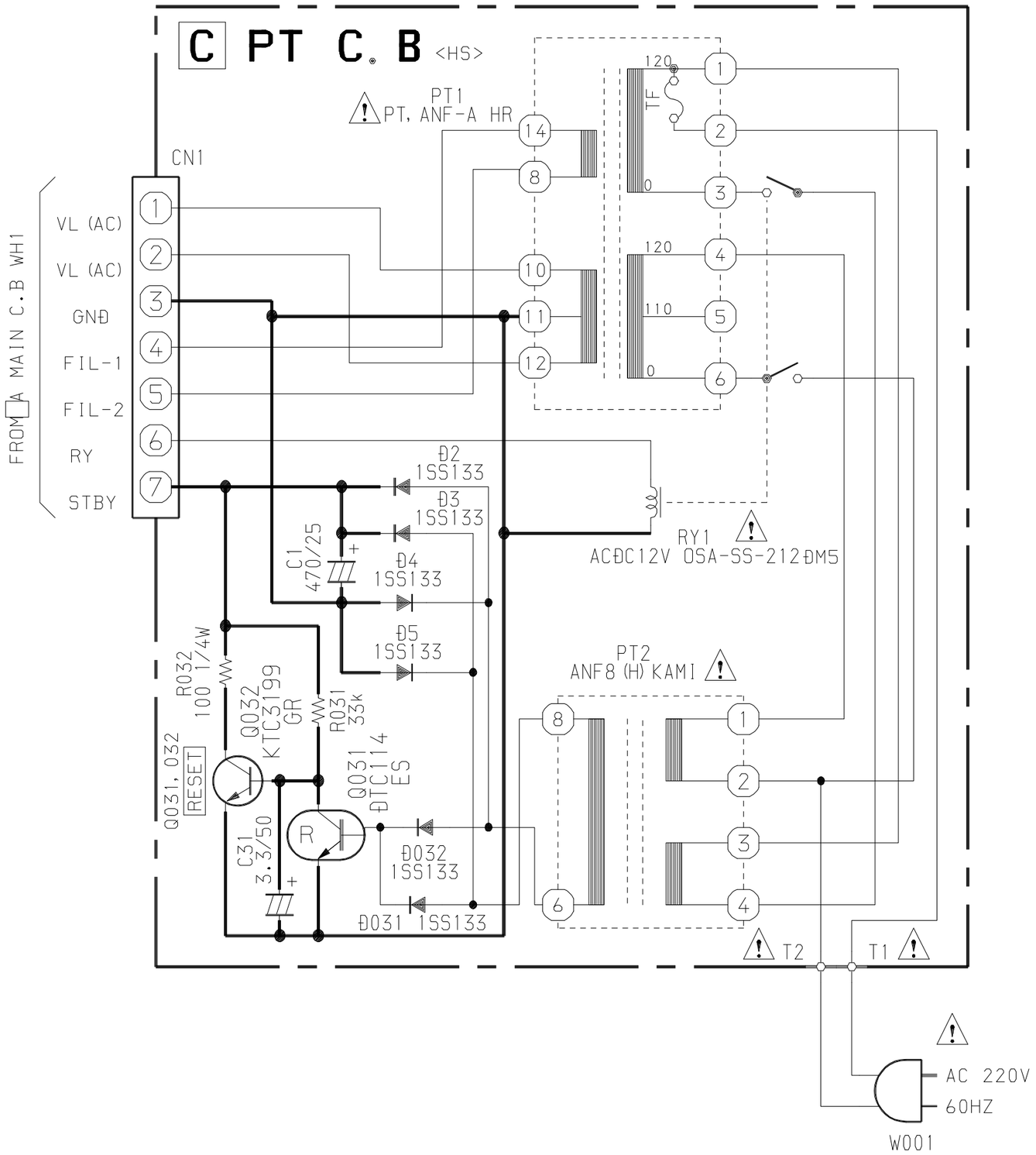

C PT C.B <HA>
RY1
T2
T1
<BLU>
<BRN>
AC 120V/
220~230V/240V
50/60HZ
PT2
PT1
TF
Q31
Q32
C31
C1
R31
R32
D32
D31
D4
D5
D2
D3
CN1
TO CN1
CNA1
FROM A MAIN C.B
WH1
WHT
S1
AC VOLTAGE
AC 120V
220~230V
240V

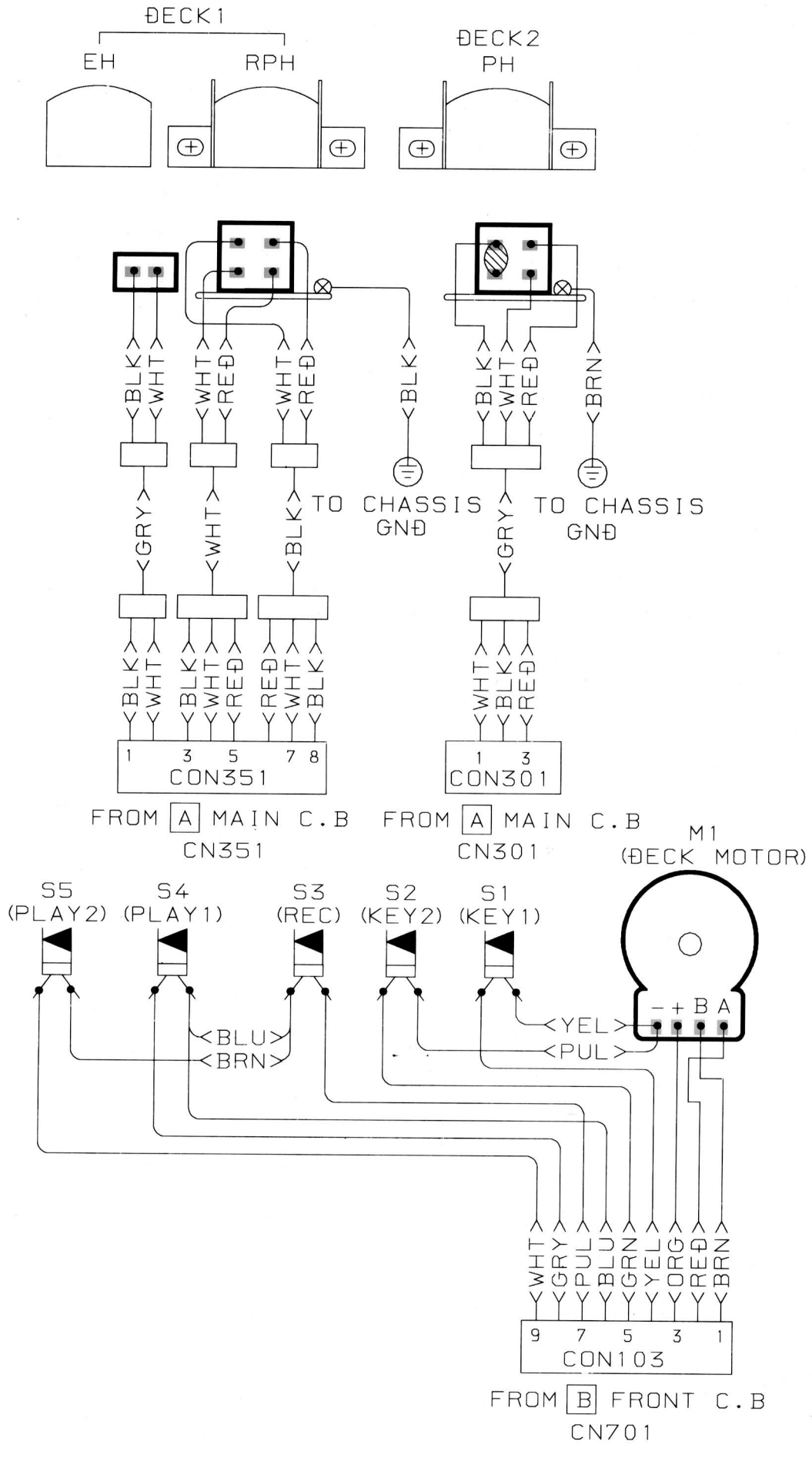
SCHEMATIC DIAGRAM – 12 (PT : HA)




C PT C.B <HS>
RY1
T002
BRN
BLU
AC 220V
60HZ
T001
Q031
B C E
D32
D31
D4
D5
D2
D3
C031
Q032
B C E
R31
R32
PT002
C001
CN1
PT001
TF
CNA1
WHT
FROM A MAIN C.B
WH1

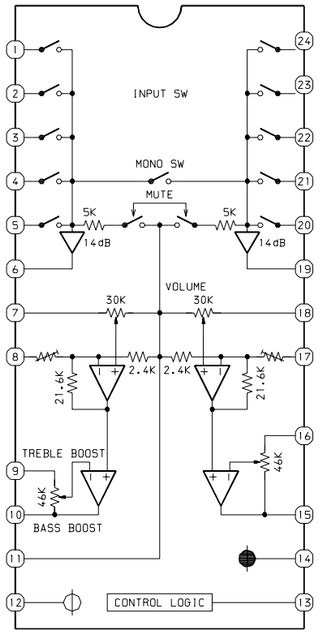
SCHEMATIC DIAGRAM – 13 (PT : HS)



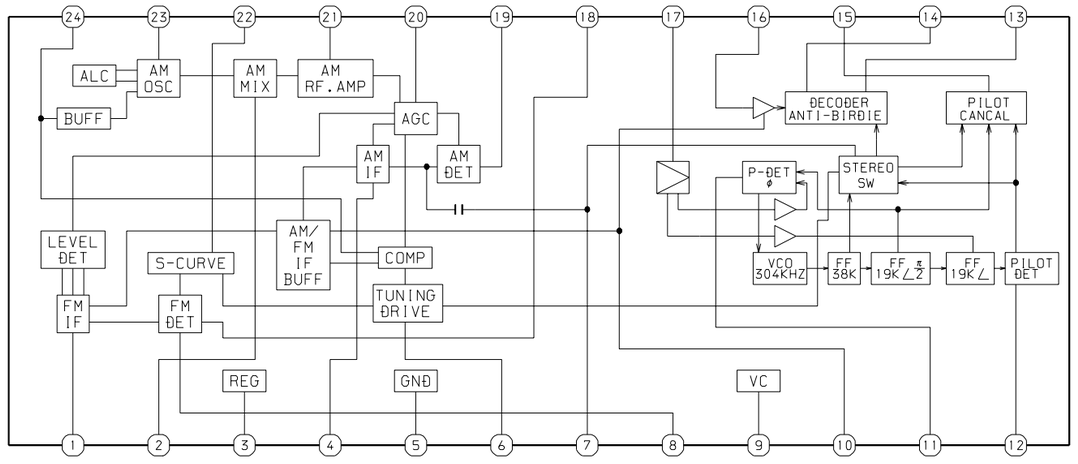

ĐECK1
EH
RPH
ĐECK2
PH
BLK
WHT
WHT
REĐ
WHT
REĐ
BLK
BLK
WHT
REĐ
BRN
TO CHASSIS
GNĐ
TO CHASSIS
GNĐ
GRY
WHT
BLK
GRY
BLK
WHT
BLK
WHT
REĐ
REĐ
WHT
BLK
WHT
BLK
REĐ
1 3 5 7 8
CON351
1 3
CON301
FROM A MAIN C.B
CN351
FROM A MAIN C.B
CN301
M1
(ĐECK MOTOR)
S5
(PLAY2)
S4
(PLAY1)
S3
(REC)
S2
(KEY2)
S1
(KEY1)
BLU
BRN
YEL
PUL
− + B A
WHT
GRY
PUL
BLU
GRN
YEL
ORG
REĐ
BRN
9 7 5 3 1
CON103
FROM B FRONT C.B
CN701

IC BLOCK DIAGRAM

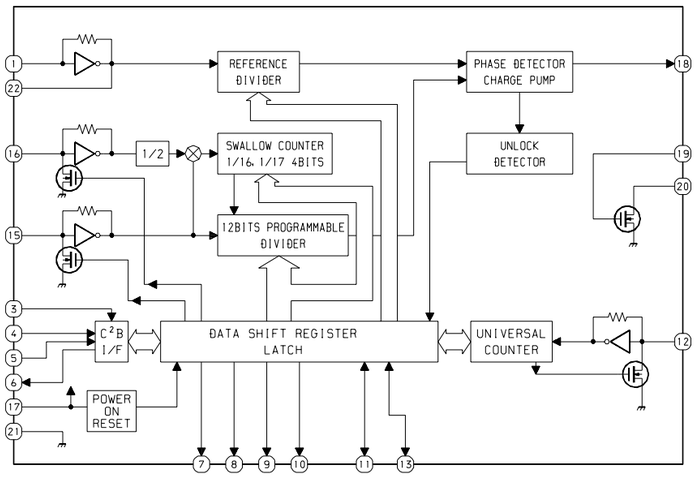
IC,M62495AFP



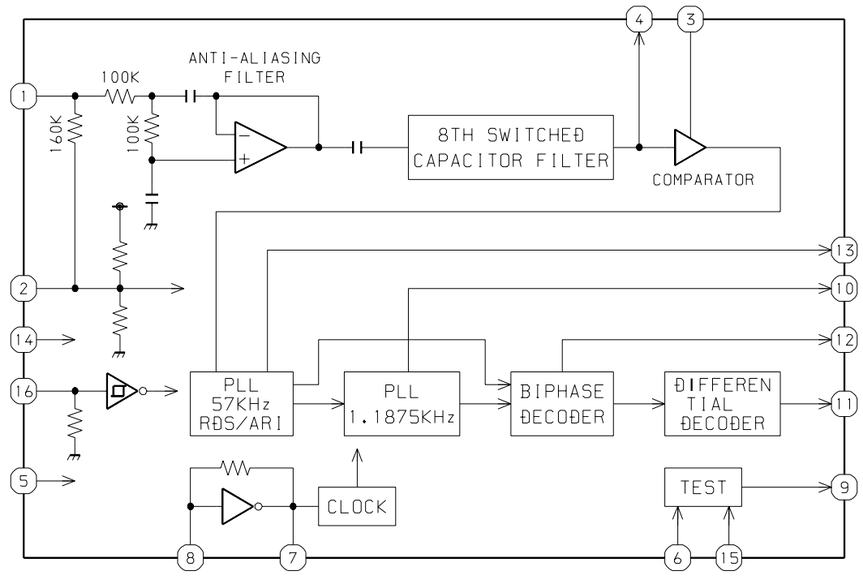
IC,LA1843 / IC,LA1844L-A



IC,LC72131D



IC,BU1920FS



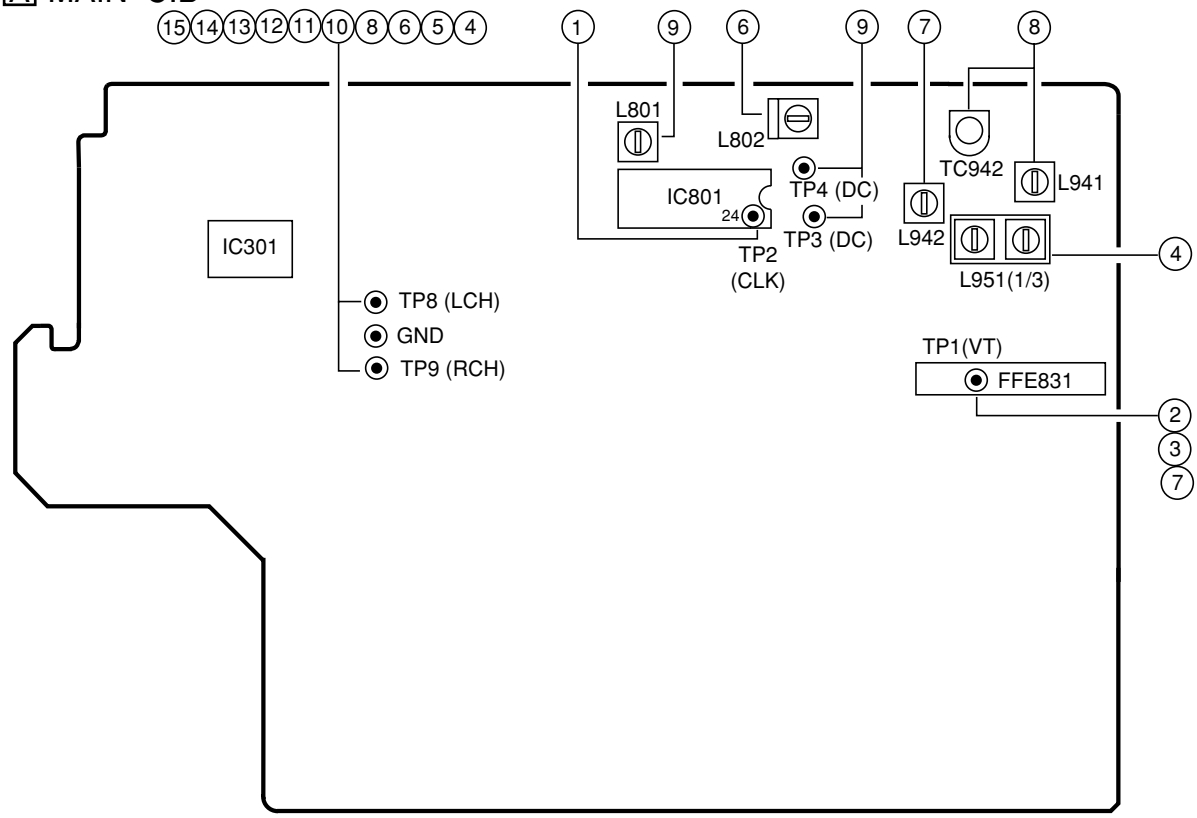
IC DESCRIPTION

IC, M38B57MCH-E236FP / M38B59MFH-E251FP

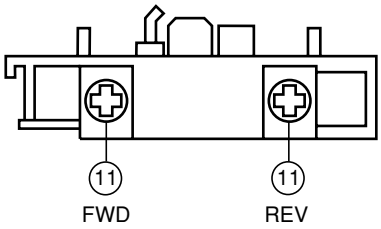
Pin No.	Pin Name	I/O	Description
1	I-SIG	I	RDS signal level A/D input. (Not used)
2	I-$\overline{\text{HOLD}}$	I	Hold voltage level A/D input.
3	I-SW (CD)	I	CD mecha SW A/D input.
4	I-DISH	I	CD turn-table position check A/D input.
5	I-KEY2	I	KEY2 A/D input.
6	I-KEY1	I	KEY1 A/D input.
7	I-RDS-DATA/ (O-DSP_DATA)	I/O	RDS data input / DSP IC data (V-CD) output. (Not used)
8	O-MOTOR	O	Deck motor supply ON/OFF output.
9	I-RMC	I	System remote control signal input. ("L"=ACTIVE)
10	$\overline{\text{RESET}}$	I	System reset input. ("L"=RESET)
11	I-$\overline{\text{STEREO}}$	I	Tuner stereo input. ("L"=STEREO)
12	O-DSC/O-PLL_DATA	O	Function IC control & PLL data output.
13	VSS	-	GND.
14,15	XIN, XOUT	I/O	4.19MHz system CLK input / output.
16	VCC	-	Power supply input.
17	O-PB1	O	Deck 1/2 switch output. ("L"=PLAYBACK DECK 1)
18	O-$\overline{\text{STBY}}$	O	Standby LED ON/OFF output. ("L"=ON)
19	O-$\overline{\text{RMT}}$	O	REC mute output. ("H"=MUTE)
20	O-$\overline{\text{BIAS}}$	O	Record bias ON/OFF output. ("L"=ON)
21	O-TU_ON	O	Tuner supply ON/OFF output. ("H"=ON)
22	O-CD_ON	O	CD supply ON/OFF output. ("H"= ON)
23	O-$\overline{\text{C.SHIFT}}$	O	MICON clock shift output. ("L"=SHIFT)
24	O-PLL-CLK	O	PLL IC CLK output.
25	I-TM_BASE	I	8 Hz time base input.
26	O-CLOSE	O	CD door close output.
27	O-CD-OPEN	O	CD door open output.
28	VEE	-	Power supply input for FL display.
29	O-STB(DSP)	O	DSP IC strobe output. (Not used)
30	K-SCAN	O	Initial key scan output.
31	O-PLL_CE	O	CD PLL IC chip enable output.
32	O-CD_LED	O	CD flash window LED output.
33~42	G10~G1	O	FL grid output (G10~G1).
43	P22	O	FL segment output (P22). (Not used)
44~58	P21~P7	O	FL segment output (P21~P7).
59	PHONO/P6	I/O	PHONO diode input / FL segment output (P6).
60	CASINO DEMO/P5	I/O	CASINO DEMO diode input (Not used) / FL segment output (P5).
61	NON-ECO/P4	I/O	ECO OFF diode input / FL segment output (P4).
62	I-TU3/P3	I/O	TU 3 diode input (Not used) / FL segment output (P3).
63	I-TU2/P2	I/O	TU 2 diode input (Not used) / FL segment output (P2).
64	I-TU1/P1	I/O	TU 1 diode input (Not used) / FL segment output (P1).

Pin No.	Pin Name	I/O	Description
65	O-DISH_R	O	CD turn-table reverse turn output.
66	O-DISH_F	O	CD turn-table forward turn output.
67	I-SUBQ	I	Sub code-Q data input.
68	O-CD_CE	O	CD DSP chip enable output.
69	I-WRQ	I	CD WRQ input.
70	O-CLK (CD)	O	CD control clock output .
71	O-DATA (CD)	O	CD control data output.
72	I-$\overline{\text{TUNE}}$/IFC	I	Tuner SD input / IF count input.
73	AVSS	-	GND.
74	VREF	-	Reference voltage.
75	I-DRF	I	CD DRF input.
76	I-RDS_CLK	I	RDS clock input. (Not used)
77	I-LEVEL	I	Connected to GND through a resistor.
78	O-POWER	O	SYSTEM Power ON/OFF output. ("H"=ON)
79	I-RE_VOL	I	Rotary encoder A/D input.
80	I-TP_SW	I	Deck mecha SW A/D input.

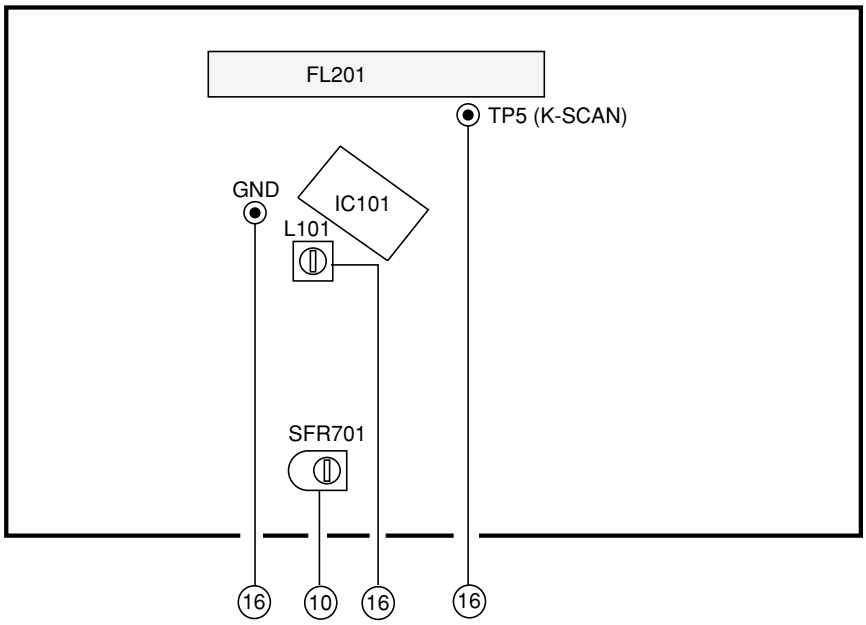
A MAIN C.B



DECK–1 R/P/E, DECK-2 P HEAD



B FRONT C.B



< TUNER SECTION >

1. Clock frequency Check
   Settings : • Test point : TP2 (CLK)
   Method : Set to AM 1710kHz(U, HA), MW 1602kHz(HS,EZ,K) and check that the test point is 2160kHz ± 0.045kHz(U, HA), 2052kHz ± 0.045kHz(HS,EZ,K).

2. AM(MW) VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to AM 1710kHz(U,HA), MW 1602kHz(EZ,K,HS) and check that the test point is less than 8.5V(U,HA), less than 8.0V (EZ,K,HS).
   Then set to 530kHz(U,HA), 531kHz(EZ,K,HS) and check that the test point is more than 0.6V.

3. FM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

4. AM(MW) Tracking Adjustment
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location :
   L951 (1/3) 1000kHz
   Method : Set to AM(MW) 999kHz and adjust L951 (1/3) to MAX.

5. FM Tracking Check
   Settings : • Test point : TP8(Lch), TP9(Rch)
   Method : Set to FM 98.0MHz and check that the test point is less than 9dBμV(U,HA,HS), less than 13dBμV(EZ,K).

6. AM(MW) IF Adjustment
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location :
   L802 ..... 450kHz

7. LW VT Adjustment<EZ,K>
   Settings : • Test point : TP1(VT)
   • Adjustment location : L942
   Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V ± 0.05V.
   Then set to LW 290kHz and check that the test point is less than 8.0V.

8. LW Tracking Adjustment<EZ,K>
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location :
   L941 ..... 144kHz
   TC942 ..... 290kHz
   Method : Set up TC942 to center before adjustment. The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX by TC942.

9. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC Balance)
   • Adjustment location : L801
   • Input level : 60dBμV
   Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V ± 400 mV with minimum distortion.

< DECK SECTION >

10. Tape Speed Adjustment (DECK 1)
    Settings : • Test tape : TTA–100
    • Test point : TP8(Lch), TP9(Rch)
    • Adjustment location : SFR701
    Method : Play back the test tape and adjust SFR701 so that the frequency counter reads 3000Hz ± 5Hz.

11. Head Azimuth Adjustment (DECK 1, DECK 2)
    Settings : • Test tape : TTA–330
    • Test point : TP8(Lch), TP9(Rch)
    • Adjustment location : Head azimuth adjustment screw
    Method : Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.

12. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–330
    • Test point :TP8(Lch), TP9(Rch)
    Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 4dB.

13. PB Sensitivity Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200
    • Test point : TP8(Lch), TP9(Rch)
    Method : Play back the test tape and check that the output level of the test point is 110mV ± 3.5dB.

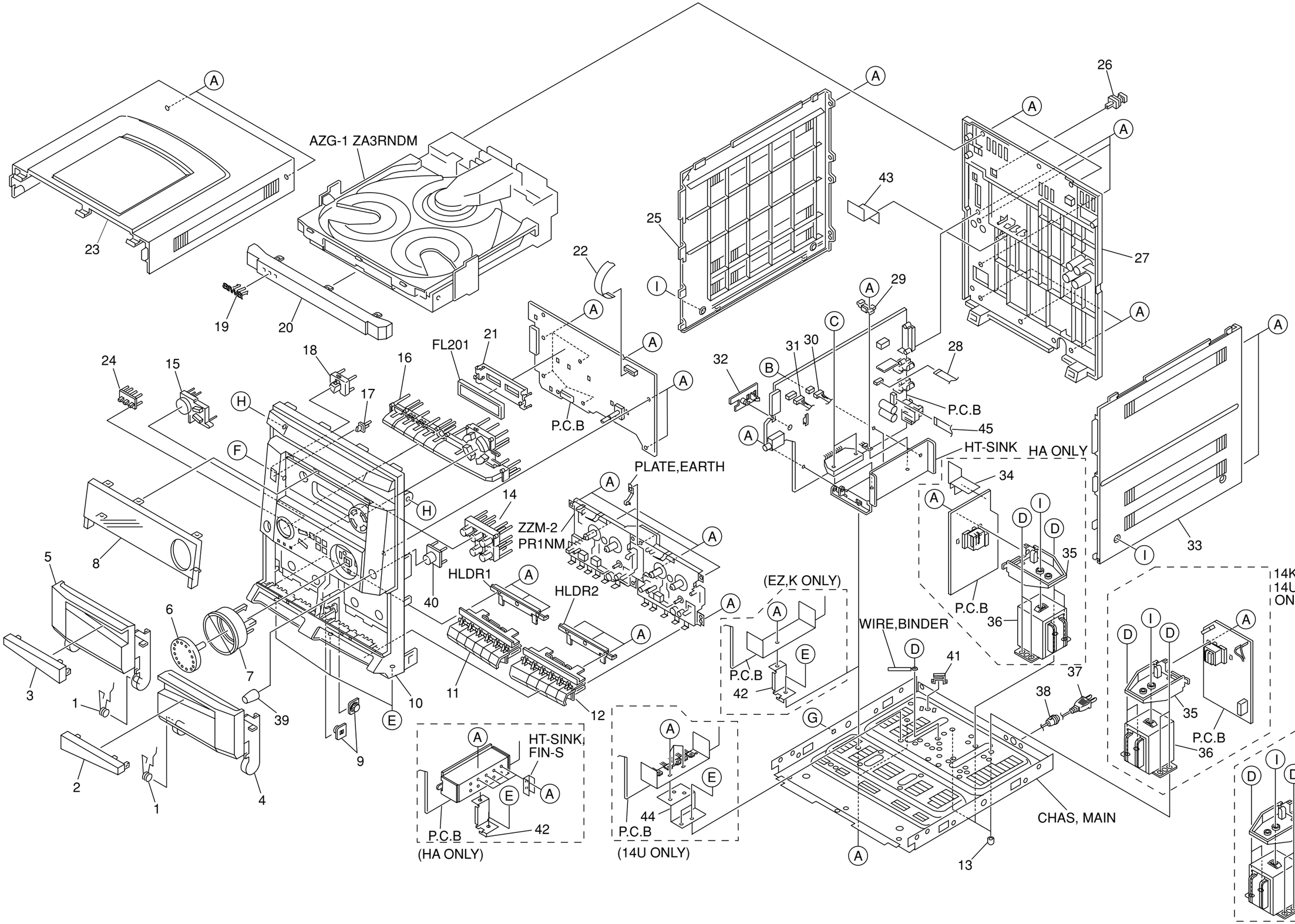
14. REC/PB Frequency Response Check (DECK 1)
    Settings : • Test tape : TTA–602
    • Test point : TP8(Lch), TP9(Rch)
    • Input signal : 1kHz / 8kHz (LINE IN)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the test points becomes -20VU. Record and play back the 1kHz and 8kHz signals and check that the output of the 8kHz signals is 0dB ± 5dB with respect to that of the 1kHz signal.

15. REC/PB Sensitivity Check (DECK 1)
    Settings : • Test tape : TTA–602
    • Test point : TP8(Lch), TP9(Rch)
    • Input signal : 1kHz (LINE IN)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is -2dB ± 3.5dB.

< FRONT SECTION >

16. u-CON OSC Adjustment
    Settings : • Test point : TP5(K-SCAN)
    • Adjustment location : L101
    Method : Insert AC plug with pressing of TUNER function key and POWER key. Adjust L101 so that the frequency across the test point is 58.350Hz ± 0.02Hz.

MECHANICAL EXPLODED VIEW 1 / 1



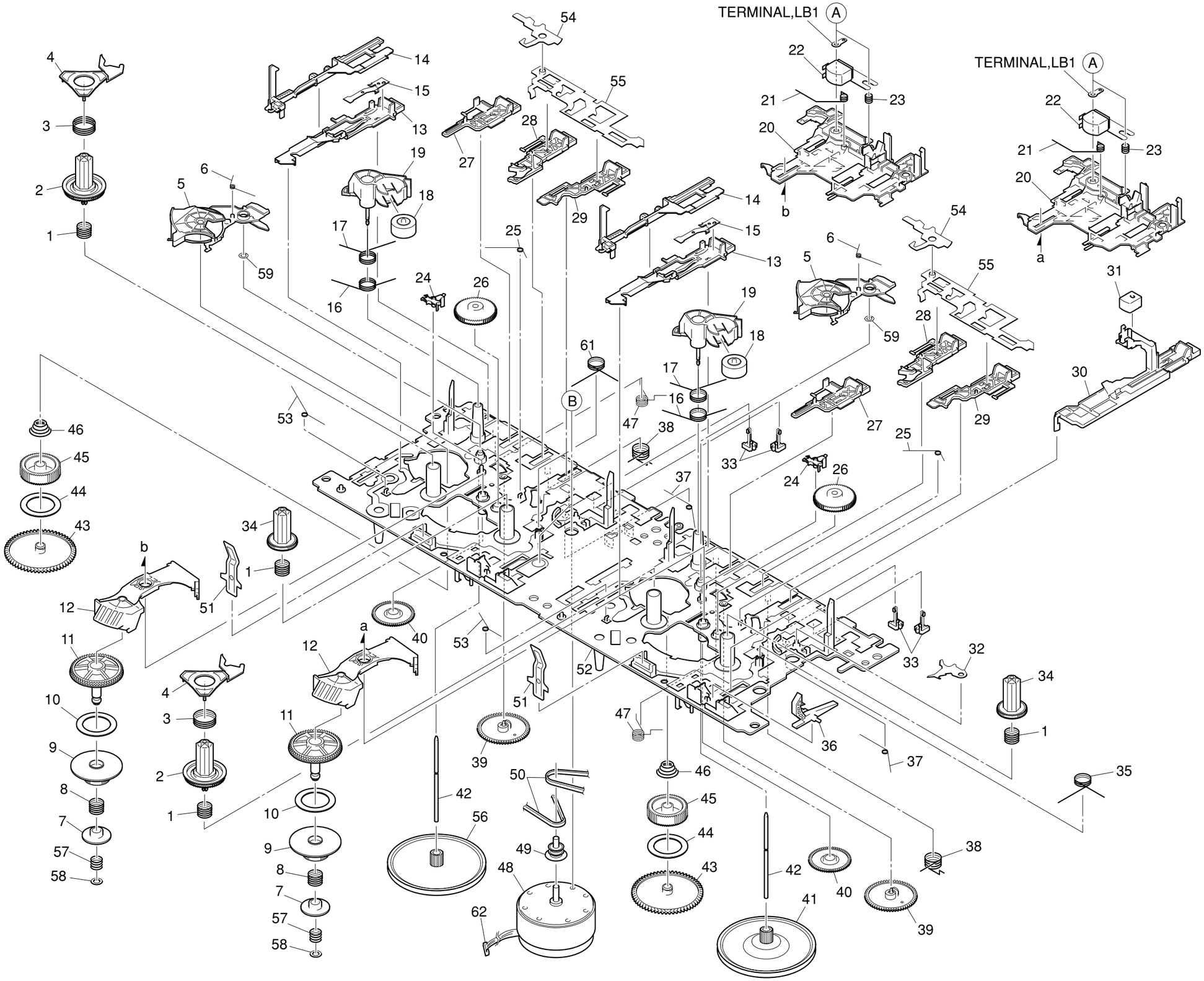
MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-NF7-218-010		SPR-T,CASS
2	8A-NFZ-007-010		WINDOW,CASS 2
3	8A-NFZ-006-010		WINDOW,CASS 1
4	8A-NFZ-004-010		BOX,CASS 2
5	8A-NFZ-003-010		BOX,CASS 1
6	8A-NFZ-011-010		KNOB,RTRY VOL
7	8A-NFZ-012-010		RING,VOL
8	8A-NFZ-054-010		WINDOW,DISP EZ BL16<16EZ>
8	8A-NFZ-051-010		WINDOW,DISPH<14HS,14K,14EZ>
8	8A-NFZ-055-010		WINDOW,DISP HA BL14E<14EHA>
8	8A-NFZ-052-010		WINDOW,DISP U AJ14<14U>
9	86-NFZ-231-010		DMPR,70
10	8A-NFZ-042-010		CABI,FR EZ<16EZ>
10	8A-NFZ-041-010		CABI,FR H<14HS>
10	8A-NFZ-001-010		CABI,FR U<EXCEPT 14HS,16EZ,14U>
10	8A-NFZ-043-010		CABI,FR U AJ14<14U>
11	8A-NFZ-016-010		KEY,CASS 1
12	8A-NFZ-017-010		KEY,CASS 2P
13	8Z-NB8-240-010		COVER, PL<EXCEPT 14HS>
14	8A-NFZ-010-010		KEY,OPE
15	8A-NFZ-013-010		KEY,CD
16	8A-NFZ-009-010		KEY,FUN<EXCEPT 14U>
16	8A-NFZ-072-010		KEY,FUN AJ14<14U>
17	8A-NFA-018-010		REFLECTOR,ECO
18	8A-NFZ-008-010		KEY,POWER<EXCEPT 14U>
18	8A-NFZ-071-010		KEY,POWER AJ14<14U>
19	87-CE3-023-010		BADGE,AIWA 30N SILV
20	8A-NFZ-002-010		PANEL,TRAY H<EXCEPT 14U>
20	8A-NFZ-044-010		PANEL,TRAY U AJ14<14U>
21	8A-NFA-208-010		GUIDE,FL 100-25 ANFA
22	88-913-221-110		FF-CABLE, 13P 1.25 220MM
23	8A-NFA-062-010		PANEL,TOP V-2
24	8A-NFZ-014-010		KEY,RDS<16EZ>
25	8A-NFA-063-010		PANEL,LEFT V-2
26	84-ZG1-245-210		CAP,OPTICAL
27	8A-NFZ-024-010		CABI,REAR EZSM BL14<14EZ>
27	8A-NFZ-025-010		CABI,REAR EZSM BL16<16EZ>
27	8A-NFZ-030-010		CABI,REAR HS W/O SPEC<14HS>
27	8A-NFZ-026-010		CABI,REAR KSM<14K>
27	8A-NFA-030-010		CABI,REAR LH W/O SPEC<14EHA>
27	8A-NFZ-033-010		CABI,REAR USM AJ14<14U>
28	88-906-251-110		FF-CABLE,6P 1.25
29	8A-NF8-205-010		HLDR,IC<14EHA>
30	8A-NFA-633-010		CONN ASSY,3P (PH)
31	8A-NFA-634-010		CONN ASSY,8P RPB
32	8A-NFA-214-010		HLDR,PWB M ANFA
33	8A-NFA-065-010		PANEL,RIGHT V-2<14HS,14EHA>
33	8A-NFA-067-010		PANEL,RIGHTV-2PL<EXCEPT 14HS,14EHA>
34	8A-NFA-212-010		PLATE,PL LH<14EHA>
35	8A-NF9-211-010		HLDR,PWB PT HI
⚠ 36	8A-NFA-608-010		PT,ANF-A EZ<14K,14EZ,16EZ>
⚠ 36	8A-NFA-606-010		PT,ANF-A HR<14HS>
⚠ 36	8A-NFA-609-010		PT,ANF-A LH<14EHA>
⚠ 36	8A-NFA-607-010		PT,ANF-A U<14U>
⚠ 37	87-A80-105-010		AC CORD ASSY,AZ<14EHA>
⚠ 37	87-A80-157-010		ACCORDASSY,EBLKCC<EXCEPT 14HS,14EHA,14U>
⚠ 37	87-A80-155-010		AC CORD ASSY,HS TS<14HS>
⚠ 37	87-A80-110-010		AC CORD ASSY,U SPT-2W<14U>
38	87-085-185-010		BUSHING, AC CORD (E)<EXCEPT 14U>
38	87-A91-422-010		BUSHING,AC CORD(U)<14U>
39	8A-NFZ-020-010		KNOB,RTRY MIC BL<14HS>
40	8A-NFZ-047-010		PLATE,MIC BL<14HS>
41	87-NF4-221-010		HLDR,CABLE<EXCEPT 14EHA>
42	88-NF9-213-010		HLDR,PWB MAIN<EXCEPT 14EHA,14U>
43	8A-NFA-215-010		PLATE,PL HR<14HS>
44	8A-NFB-202-010		HLDR,HT-SINK S STEEL<14U>
45	85-NF5-628-010		F-CABLE 7P-2.5<14K,14EZ,16EZ,14U>
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
C	87-067-581-010		TAPPING SCREW, BVT2+3-15<14EHA>
D	87-078-191-010		S-SCREW,IT+4-10
E	87-067-688-010		BVTT+3-6
F	87-723-096-410		QT2+3-10W/O SLOT BL
G	87-721-096-410		QT2+3-10 GLD<14EHA>
H	87-721-097-410		QT2+3-12 GLD
I	87-067-641-010		UTT2+3-8(W/O SLOT)BL

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1



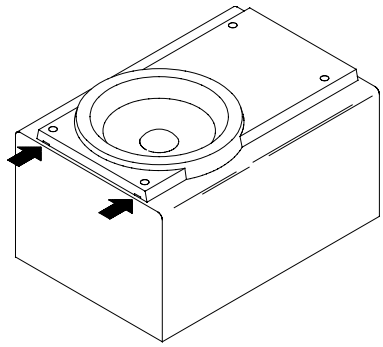
TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM1-254-210		SPR-C,REEL R
2	8Z-ZM1-225-110		GEAR,REEL R
3	8Z-ZM1-253-110		SPR-C,AUTO SENSOR
4	8Z-ZM1-217-110		LEVER,AUTO SENSOR
5	8Z-ZM1-212-110		LEVER,T-UP
6	8Z-ZM1-245-010		SPR-T,AUTO
7	8Z-ZM1-236-010		CLR,SLIP FF/REW
8	8Z-ZM1-252-010		SPR-C,FF/REW
9	8Z-ZM1-230-010		GEAR,SLIP FF/REW A
10	8Z-ZM1-269-010		FELT,FF/REW 2
11	8Z-ZM1-238-110		GEAR,SLIP FF/REW B 2
12	8Z-ZM1-237-010		LEVER,FF/REW 2
13	8Z-ZM1-209-210		LEVER,PAUSE
14	8Z-ZM1-218-110		LEVER,E-LOCK H
15	8Z-ZM1-256-010		SPR-P,PAUSE
16	8Z-ZM1-244-010		SPR-T,T-UP
17	8Z-ZM1-247-210		SPR-T,PINCH
18	8Z-ZM1-261-110		ROLLER ASSY,PINCH
19	8Z-ZM1-221-010		LEVER,PINCH
20	8Z-ZM1-205-210		LEVER,PLAY
21	8Z-ZM1-248-110		SPR-T,BRG
22	87-A90-403-110		HEAD,RPH MS15R
23	84-ZM2-227-310		SPR-C,AZIMUTH
24	8Z-ZM1-216-010		LEVER,AUTO
25	8Z-ZM1-246-010		SPR-T,AUTO 2
26	8Z-ZM2-214-010		GEAR,IDL REW ZZM-2
27	8Z-ZM2-212-010		LEVER,STOP ZZM-2
28	8Z-ZM1-207-010		LEVER,FF
29	8Z-ZM1-206-010		LEVER,REW
30	8Z-ZM1-210-010		LEVER,REC
31	87-A90-404-010		HEAD,EH LE15B
32	8Z-ZM2-218-010		LEVER,REC LOCK ZZM-2
33	87-A91-492-010		SW,LEAF MSW18560
34	8Z-ZM1-226-010		GEAR,REEL L
35	8Z-ZM1-241-010		SPR-T,PLAY
36	8Z-ZM1-220-110		LEVER,REC SENSOR
37	8Z-ZM1-249-010		SPR-T,FR
38	8Z-ZM1-242-110		SPR-T,FF/REW
39	8Z-ZM1-229-010		GEAR,CAM
40	8Z-ZM1-232-010		GEAR,IDL FF/REW
41	8Z-ZM1-234-010		FLY-WHL,ZZM-1
42	8Z-ZM1-267-010		SHAFT,CAPSTAN 2
43	8Z-ZM1-228-010		GEAR,SLIP T-UP B
44	8Z-ZM1-265-010		FELT,T-UP
45	8Z-ZM1-227-010		GEAR,SLIP T-UP A
46	8Z-ZM1-251-110		SPR-C,T-UP SLIP
47	8Z-ZM1-243-210		SPR-T,STOP/PAUSE
48	87-A91-532-010		MOT,MS15U2LW1A
49	8Z-ZM1-235-010		PULLEY,MOT
50	8Z-ZM2-216-010		BELT,MAIN M
51	8Z-ZM1-260-010		SPR-P,CASETTE
52	8Z-ZM2-201-010		CHAS ASSY,ZZM-2
53	8Z-ZM1-255-110		SPR-T,E-LOCK
54	8Z-ZM2-219-010		LEVER,E-OPEN ZZM-2
55	8Z-ZM1-214-110		LEVER,LOCK
56	8Z-ZM2-211-010		FLY-WHL,ZZM-2
57	8Z-ZM1-257-110		SPR-C,F/R
58	8Z-ZM1-275-010		W-L,1.47-4-0.25
59	80-ZM6-243-010		SH 1.75-3.6-0.5 SLT
60	87-A91-494-010		SW,LEAF MSW17820
61	8Z-ZM1-241-010		SPR-T,PLAY
62	8Z-ZM2-601-010		CONN ASSY,9P ZZM-2
A	84-ZM2-242-010		S-SCREW,AZ1-2-6.4
B	8Z-ZM2-220-110		V+2.6 ZZM-2

SPEAKER DISASSEMBLY INSTRUCTIONS

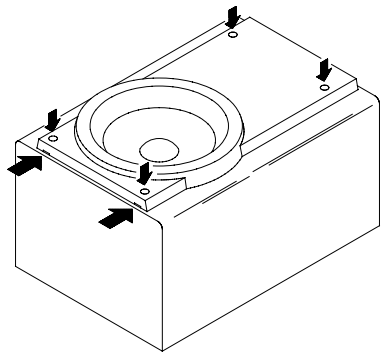
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



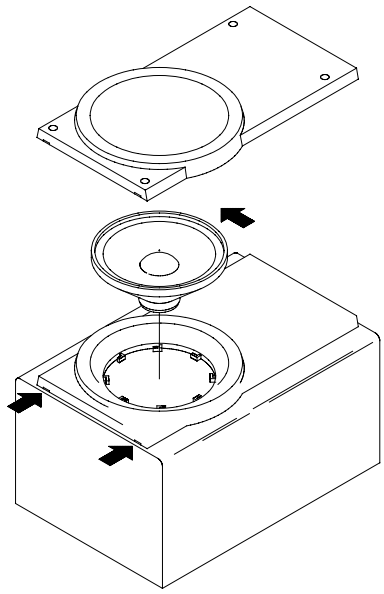
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

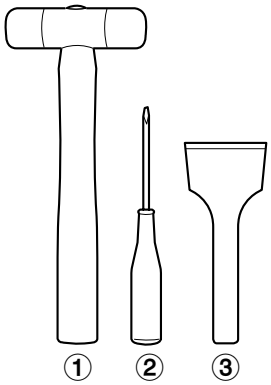


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

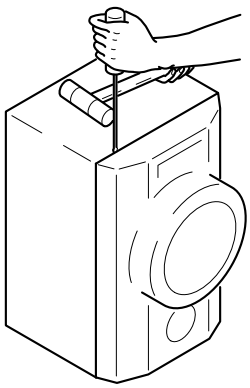


Fig-1

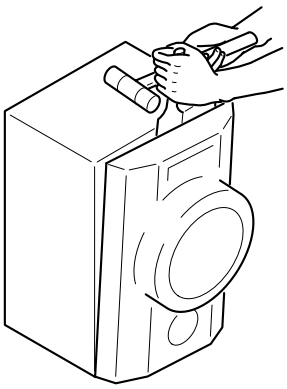


Fig-2

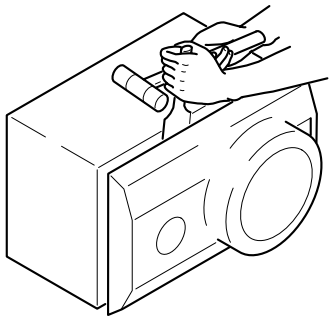


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST
SX-NBL11(Y1SL,YSC9,YSC,YSL) / SX-NBL16(YSC9,YSC)
SX-NBL17(YLSC9,YLSC) / SX-NAJ11(YUSL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NSB-001-010		PANEL,FR
2	8A-NSB-014-010		GRILLE,FRAME ASSY R<16YSC>
2	8A-NSB-003-010		GRILLE,FRAME ASSY<EXCEPT 16YSC>
3	8Z-NSL-601-110		SPKR, W120<YSC9>
3	8Z-NSL-603-010		SPKR, W 120<YSC9>
3	8A-NSL-602-010		SPKR, 120<YLSC9,YLSC>
3	8A-NSL-606-010		SPKR, W120<11YSC,16YSC,YSL,YUSL,Y1SL>
4	87-NS7-611-010		CORD,SPKR

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NFZ-906-110		IB,EZ(9L)M -BL14<14EZ>
1	8A-NFZ-916-010		IB,EZ(9L)M -BL16(RDS)<16EZ>
1	8A-NFZ-905-010		IB,K(E)M -BL14<14K>
1	8A-NFZ-902-010		IB,LH(ESP)M -BL14<HA>
1	8A-NFZ-923-010		IB,U(ESF)M -AJ14<U>
2	8Z-NF9-701-210		RC UNIT,ZAS02
3	87-043-115-010		ANT,FEEDER FM<HS,HA,U>
3	87-A90-118-010		ANT,WIRE FM (Z)<14K,14EZ,16EZ>
4	87-006-225-010		AM LOOP ANT NC2

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